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TREC TECHNICAL REPORT 60-53

TWO-DIMENSIONAL WIND-TUNNEL TESTS of an H-34 MAIN ROTOR AIRFOIL SECTION

Project 9R38-11-009-04

Contract DA 44-177-TC-657

September 1960

prepared by :

United Aircraft Corporation
Sikorsky Aircraft Division
Stratford, Connecticut

3494-60

(18) TRT [illegible]
(17) TR-60-5[illegible]

(1) Proj[redacted] 9R38-11-009-04
(15) Contract DA 44-177-TC-657,

(11) Sep[redacted] [redacted]960,
(12) 93p.

(6) TWO-DIMENSIONAL WIND TUNNEL TESTS OF AN

H-34 MAIN ROTOR AIRFOIL SECTION.

(9) Technical rept.,

(14) Rept no. SER-58304

[redacted]:

[redacted]
(5) SIKORSKY AIRCRAFT, [redacted]
Stratford, Conn[redacted]

(10) by Alfred A. L[illegible]

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U. S. Army Transportation Research Command
Fort Eustis, Virginia

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UNITED AIRCRAFT CORPORATION
SIKORSKY AIRCRAFT DIVISION

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ILLUSTRATIONS

LIST OF SYMBOLS

c	Airfoil chord, feet
p_l	Static pressure measured on airfoil lower surface, psf
p_o	Free stream static pressure
p_u	Static pressure measured on airfoil upper surface, psf
q_o	Dynamic pressure $1/2 \rho V^2$
x	Chordwise distance from leading edge, feet
C_D	Section drag coefficient, D/q_oS
C_L	Section lift coefficient, L/q_oS
c_L	Approximate section lift coefficient, $C_N \cos \alpha$
C_m	Section pitching moment coefficient, $M_{c/4}/q_oSc$
C_N	Normal force coefficient, $C_N = \int_0^c -(C_{pu} - C_{pl}) d\,(x/c)$
C_{pu}	Pressure coefficient, upper surface, $(pu-po)/q_o$
C_{pl}	Pressure coefficient, lower surface, $(pl-po)/q_o$
D	Drag, pounds
L	Lift, pounds
$M_{c/4}$	Pitching moment about quarter chord line, foot-pounds
S	Airfoil plan area, square feet
V	Wind tunnel velocity, fps
α	Corrected angle of attack, degrees
ρ	Density of air, slugs per cubic foot
μ	Dynamic viscosity, slugs per foot second

LIST OF SYMBOLS (cont'd)

Symbol Definitions for Tabulated IBM Pressure Coefficient Data, App. II

A	Corrected angle of attack, degrees
AU	Uncorrected angle of attack, degrees
C	Airfoil chord, feet
CP	Pressure Coefficient
L	Lower surface
M	Corrected Mach Number
MU	Uncorrected Mach Number (nominal)
PO	Free stream static pressure, psf
QO	Dynamic pressure, psf
U	Upper surface
X	Chordwise distance from leading edge, feet

SUMMARY

Tests were conducted in the two-dimensional channel of the United Aircraft Corporation 8 foot wind tunnel at Mach Numbers from 0.30 to 0.80 to determine the surface pressure distributions on a Sikorsky H-34 main rotor production blade section. Twenty-nine static pressure taps were located on the upper and lower surfaces of the model. In addition three component force and moment measurements, were obtained, along with a limited amount of wake survey drag data. The pressure coefficients are tabulated for each Mach Number and angle of attack. The variation of force and moment coefficient with angle of attack at each Mach Number is also included. As the data are intended primarily for use by the National Aeronautics and Space Administration, no detailed analysis has been made of the results of this test program.

INTRODUCTION

Sikorsky Aircraft, under sponsorship of the U. S. Army Transportation Research Command, USA TRECOM, (Reference 1), has recently instrumented a full scale H-34 rotor blade with miniature electrical pressure transducers to permit the measurement of surface pressure distributions at various radial stations. The aircraft will be flight tested by the National Aeronautics and Space Administration to obtain instantaneous air loads on a full scale rotor in flight.

A previous wind tunnel investigation of rotor blade aerodynamic loading conducted by the NACA (References 2 and 3) showed that for a thorough evaluation of the three dimensional effects that are present on a rotor blade in flight, a knowledge of the steady-state two-dimensional pressure distributions on the same airfoil section was required as a reference. A similar basis for analysis is even more necessary for the flight test program referred to above for two reasons. First, the test is to be conducted on a production rotor blade with certain physical deviations from a true NACA 0012 profile, and consequent differences in surface pressure distributions from published data on the 0012 airfoil. Secondly, adequate pressure loading data are not available even on a true 0012 profile, in the Mach Number and angle of attack range which will be encountered in flight test.

The purpose of the present program therefore was to obtain chordwise static pressure distributions on a Sikorsky H-34 helicopter production main rotor blade section. As an addition to the primary purpose of the program, three component force and moment data, along with limited wake survey drag measurements, were obtained.

This work was performed under the sponsorship of USA TRECOM, contract DA 44-177-TC-657. The results of this investigation will be used in the evaluation of the flight test data obtained from the full scale H-34 test described above.

TEST EQUIPMENT AND PROCEDURE

DESCRIPTION OF TEST FACILITY

The United Aircraft Corporation two-dimensional channel is composed of a special insert in the U. A. C. large subsonic wind tunnel. This wind tunnel is powered by a 9,000 horsepower motor and has interchangeable octagonal test sections of 8 feet and 18 feet across the flats. The two-dimensional airfoil test channel consists of two identical sidewalls which are inserted in the 8-foot octagonal test section to form a rectangular test region and two trapezoidal outer passages (see Figure 1). The channel, 125 inches long, provides a test section 93 inches high and 33 inches wide. Airfoils are mounted with their pitching axis 66 inches downstream of the channel leading edge to insure minimum effect of model attitude on test section velocity. Linkages and support struts connected to the electro-mechanical balance beneath the tunnel extend up through the hollow side-walls and are attached to the model spar by end fittings. The mechanical balance measures lift and drag forces directly. A Baldwin-Lima-Hamilton bending beam equipped with strain gages is used to obtain pitching moment. A wake survey rake had been installed for a previous test and was used to afford an alternate means of obtaining drag measurements. It consisted of 46 total pressure tubes and 2 static pressure tubes located 39 inches downstream of the model supports.

DESCRIPTION OF MODEL

The model was made from an untwisted portion of a production Sikorsky H-34 main rotor blade, consisting of an extruded spar and three trailing edge pockets. The outer two trailing edge pockets were formed of bonded "honeycomb" covered with a sheet aluminum skin. The center pocket construction consisted of one stainless steel rib in the center of the pocket and four aluminum ribs, evenly spaced and covered with sheet aluminum skin. This center pocket construction provided the space necessary for the installation of the twenty-nine surface static pressure taps consisting of .0625 inch diameter stainless steel tubing, which in turn were plumbed to a manometer board. The pressure orifices were located at half span at the following stations (upper and lower surfaces), expressed in percent of chord: 0, 0.8, 1.7, 4.0, 6.5, 9.0, 13.0, 16.8, 23.3, 33.5, 50.0, 62.5, 76.9, 91.5, and 96.0. The trailing edge pocket was then filled with plastic foam to stiffen the skin and prevent any possibility of panel flutter at severe loading conditions. The model has a total chord of 16.4 inches and a span of 32.70 inches, with an NACA 0012 profile based on a chord of 16.0 inches, modified by a 0.4 inch trailing edge tab extension .096 inches thick. (This trailing edge tab may be deflected upward to approximately a three degree angle during production testing of the full scale blade to assure proper track and balance). A view of the instrumented blade section is shown in figure 2, and a comparison of the contour at half-span of the test airfoil with the contour of a true NACA 0012 section is presented in figure 3.

TEST PROCEDURE

The model was tested at nominal Mach Numbers of 0.30, 0.40, 0.50, 0.60, 0.65, 0.70, 0.75, and 0.80, at angles of attack ranging from -4 degrees to 26 degrees at the lowest Mach Numbers. The maximum angles of attack at the higher Mach Numbers were limited by the tunnel power available. The Reynolds Numbers corresponding to the test conditions are shown in figure 4.

The model was also tested with the trailing edge tab deflected upwards at the standard production test angle at Mach Numbers of 0.30, 0.40, 0.50, 0.60, 0.70, and 0.80. This was done to obtain data to aid in the evaluation of results from the full scale rotor blade test, for which the trailing edge tab was deflected for a short spanwise distance near the tip to provide proper track and balance.

The static pressures on the model were recorded by photographing a mercury manometer board. The values of force balance lift, drag, and pitching moment were manually recorded. A wake survey rake had been installed in the test section for use in the preceding test program, and the pressures obtained during the early portion of the present test were recorded to afford a check on the drag obtained with the balance. However, the wake rake supports failed after a Mach Number of .6 was obtained and no further data could be acquired.

DATA REDUCTION AND REPEATABILITY

REDUCTION OF DATA

The magnitude of the manometer tube pressures were recorded on IBM cards by means of a manually operated electro-mechanical film reader. An IBM 704 electronic data processing machine program was then used to compute the corrected pressure coefficient, corrected Mach Number, and corrected angle of attack.

The force balance data were immediately reduced to corrected coefficient form by the use of a small electronic computer. The force coefficient data were continuously plotted to produce a current record of the results during the program.

The wake drag data were reduced using the tables and charts of Reference 4. This method assumes that the wake drag coefficient is proportional to the total head loss in the airfoil wake, and further assumes that the variation of total head loss across the wake has the typical form (resembling a cycle of a cosine squared curve).

Tunnel wall corrections were applied to all the foregoing data using the equations of Reference 5.

REPEATABILITY OF DATA

Previous tunnel balance calibrations have shown the balance to be repeatable to ±1.25 pounds of lift, ±0.3 pounds of drag, and ±1.5 foot pounds of pitching moment for steady loads. The average zero shift for all runs was ±0.8 pounds of lift, ±0.5 pounds of drag, and ±0.5 foot pounds of pitching moment.

The estimated average variations in aerodynamic parameters with Mach Number, as determined from analysis of the present data, are shown in the following tabulation:

Nominal Mach Number	0.4	0.6	0.8
M	±.003	±.002	±.002
α	± 20 min.	± 20 min.	± 20 min.
C_p	±.026	±.014	±.009
C_L	±.010	±.006	±.004
C_D	±.0013	±.0010	±.0010
C_m	±.003	±.001	±.001

Although all of the data obtained during the test have been presented for the sake of completeness, care should be taken in interpreting the data at high angles of attack, due to possible interference caused by the tunnel walls. Discrepancies between the force balance and wake survey drag coefficients are discussed in the section entitled "Presentation of Results."

PRESENTATION OF RESULTS

A portion of the pressure data has been plotted in the form of surface pressure coefficient versus chordwise distance from the airfoil leading edge at four angles of attack for each of eight Mach Numbers. Figures 5 through 20 present these data obtained with zero tab deflection and figures 21 through 32 present similar data for the production tab deflection.

The force and moment data are presented in figures 33 through 46 in the form of lift, drag, and pitching moment coefficient versus angle of attack. Figures 33 through 40 present data obtained at the various Mach Numbers with no trailing edge tab deflection. To afford a correlation between the measured lift coefficients and the pressure coefficients a certain amount of the plotted pressure distributions were integrated to yield the normal force coefficient. Multiplying this normal force coefficient by the cosine of the airfoil angle of attack yields an approximate C_L which was then spotted on the curves obtained with the force balance. The agreement is generally quite reasonable although the approximate lift coefficients determined from the integrated pressures are frequently less than the balance data.

Figures 33 to 36 also compare the drag coefficients as determined from the force balance and those measured by the wake survey rake for those conditions where both measurements were obtained. As discussed in Reference 6, it is inherently difficult to obtain two-dimensional drag data from a force balance, which measures the average drag on the model, where three dimensional effects such as the end gap and the sidewall boundary layer are present. Therefore, the wake survey data are more representative of the true two-dimensional drag forces at low angles of attack. At high angles of attack or in the presence of shocks however, the procedure used to compute the drag can lead to excessive errors. Inasmuch as the wake survey data were limited to but a few conditions, both sources of data are presented for the sake of completeness. Above a Mach Number of .65 the force balance data agree favorably with previous Sikorsky tests of production airfoil sections.

Figures 41 through 46 present data obtained with the trailing edge tab of the model deflected upward at the standard production test angle, approximately three degrees. Results for those data points which exceed the figure limits are presented in Appendix I. Although no wake survey drag data are available for the deflected tab condition, differences between the balance and the wake survey drags similar to the undeflected tab condition would be expected.

All of the pressure data obtained during the investigation are presented in tabular form in Appendix II in the form of pressure coefficients at each chordwise location. Also listed are the Mach Numbers and angles of attack, both corrected and uncorrected, the dynamic pressure, and the free stream static pressure corrected for tunnel wall effects. The run number is also listed to facilitate correlation of pressure distributions with force balance measurements.

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5. Allen, J. J. and Vincenti, W. G., Wall Interference in a Two-Dimensional Flow Tunnel, with Consideration of the Effects of Compressibility, NACA Report 782, 1944.

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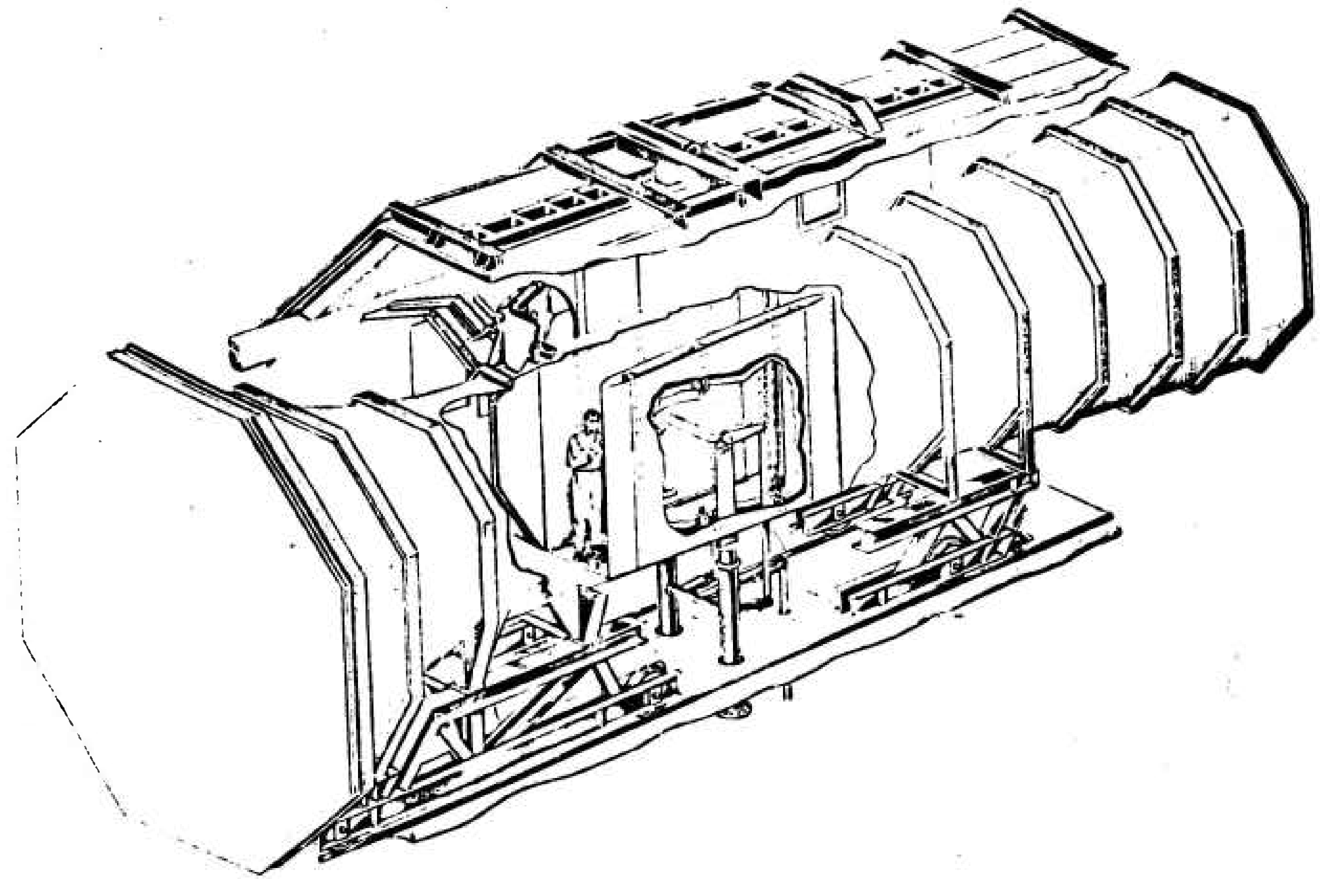
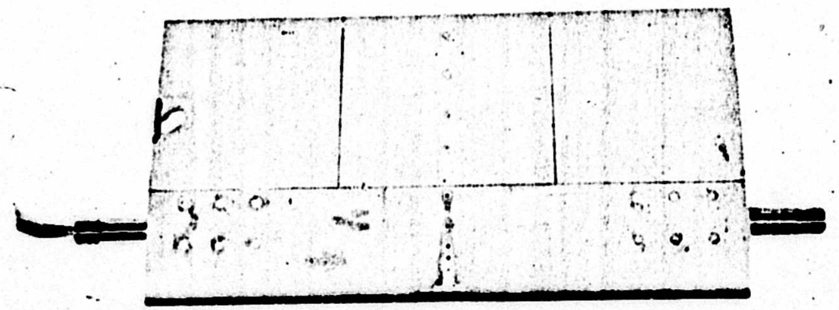
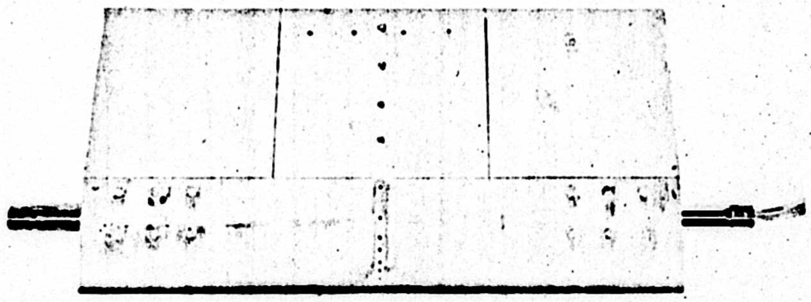


FIGURE I. TWO DIMENSIONAL AIRFOIL TESTING FACILITIES

H-34 MAIN ROTOR SECTION



TOP SURFACE



BOTTOM SURFACE

FIGURE 2. H-34 WIND TUNNEL MODEL

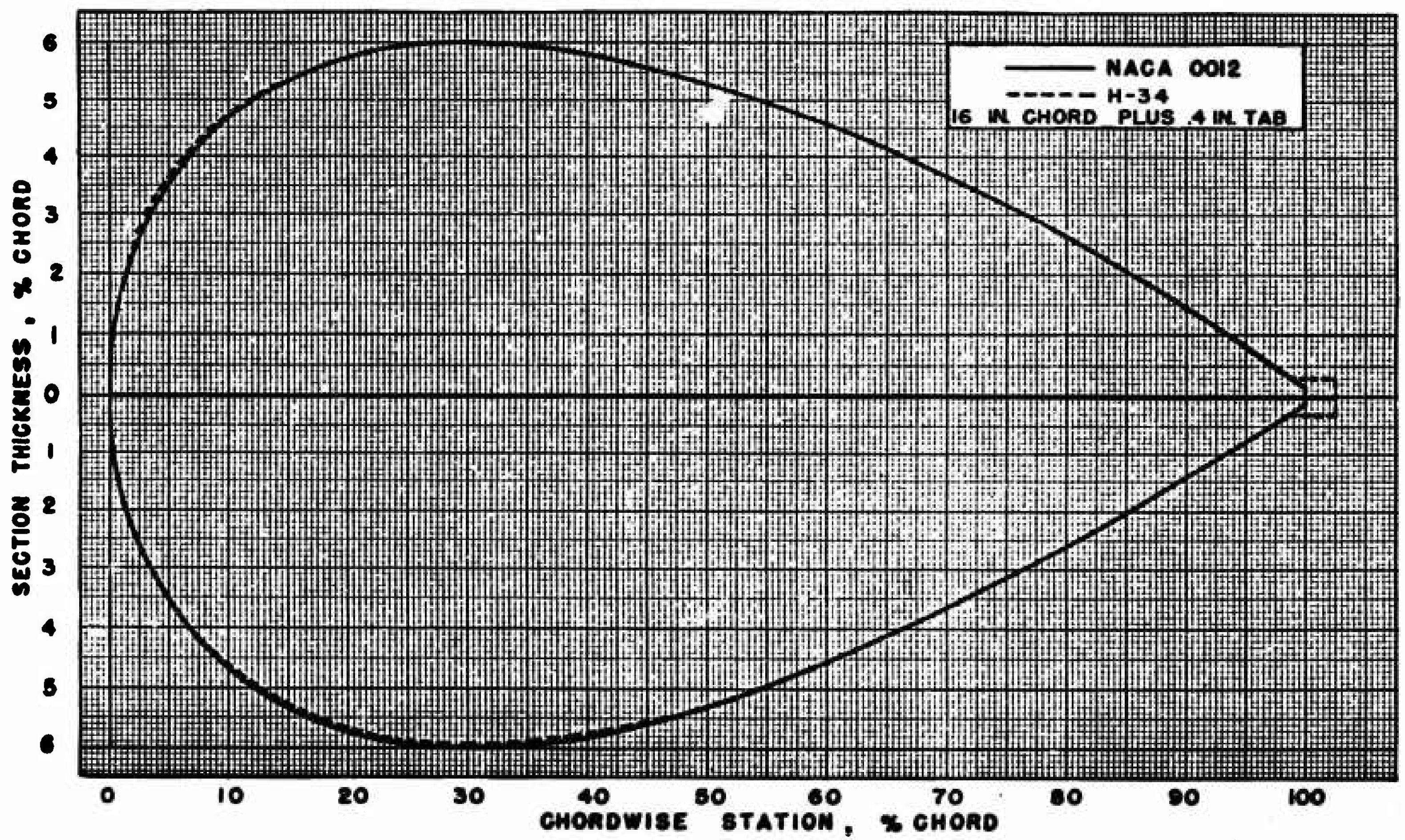


FIGURE 3. AIRFOIL CONTOUR IN COMPARISON TO NACA 0012 SECTION

H-34 AIRFOIL AT 1/2 SPAN

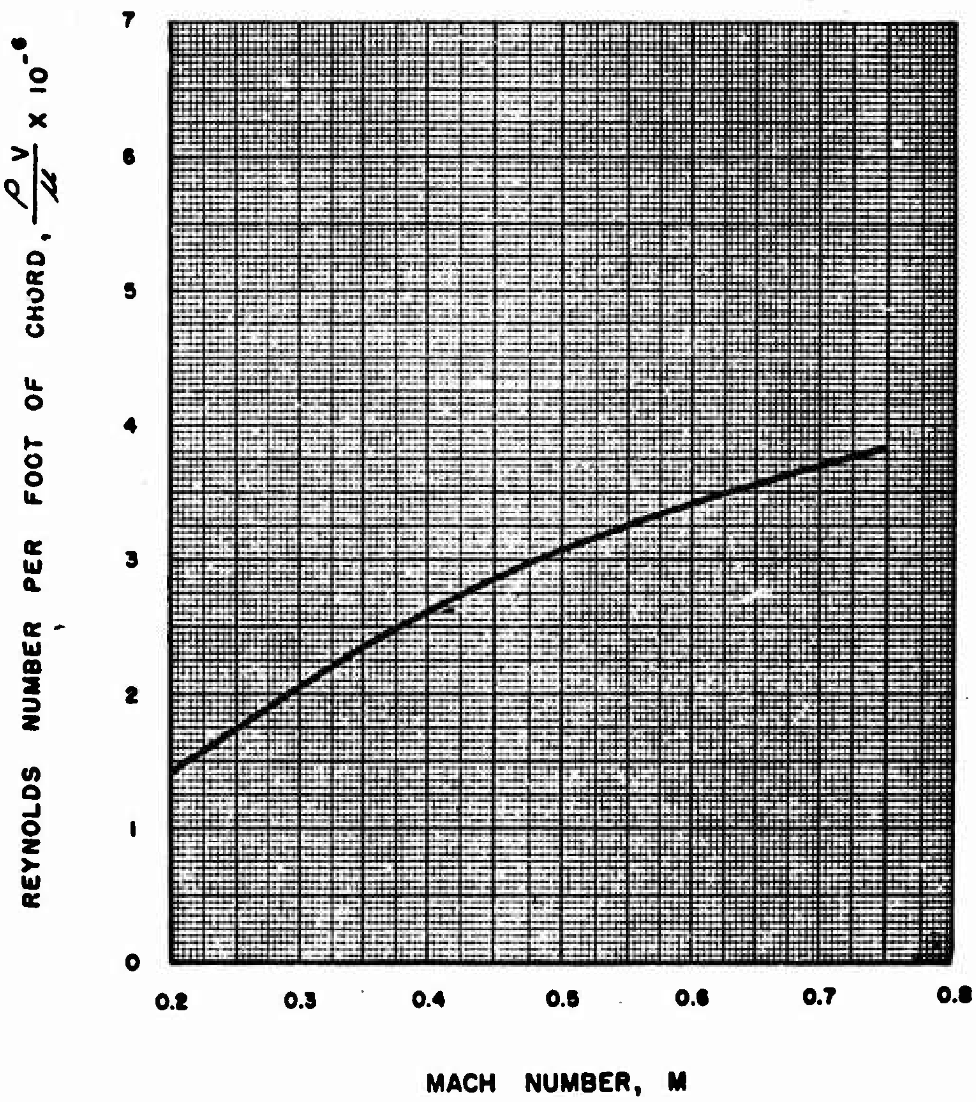


FIGURE 4. VARIATION OF REYNOLDS NUMBER WITH MACH NUMBER

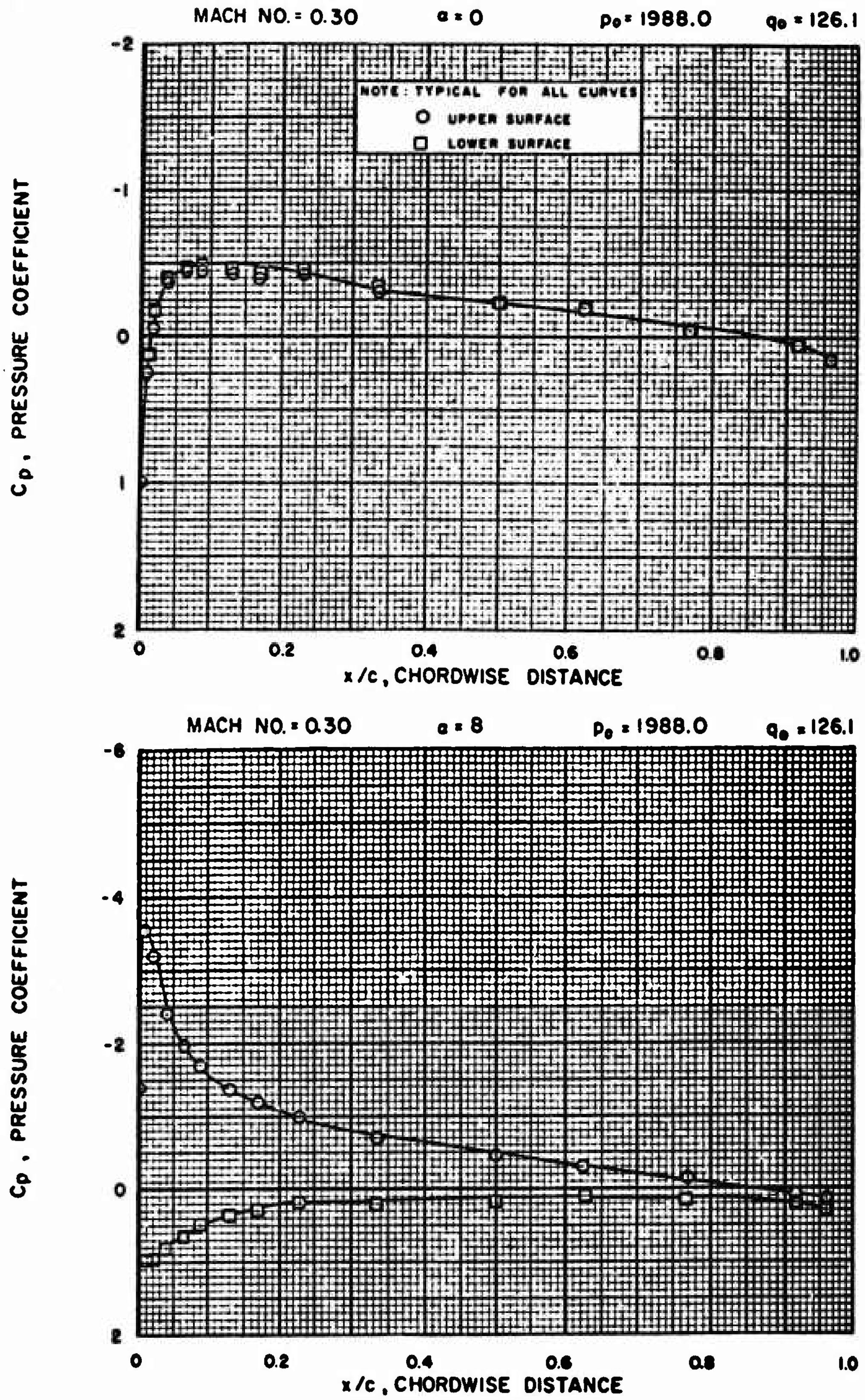


FIGURE 5 CHORDWISE PRESSURE COEFFICIENTS

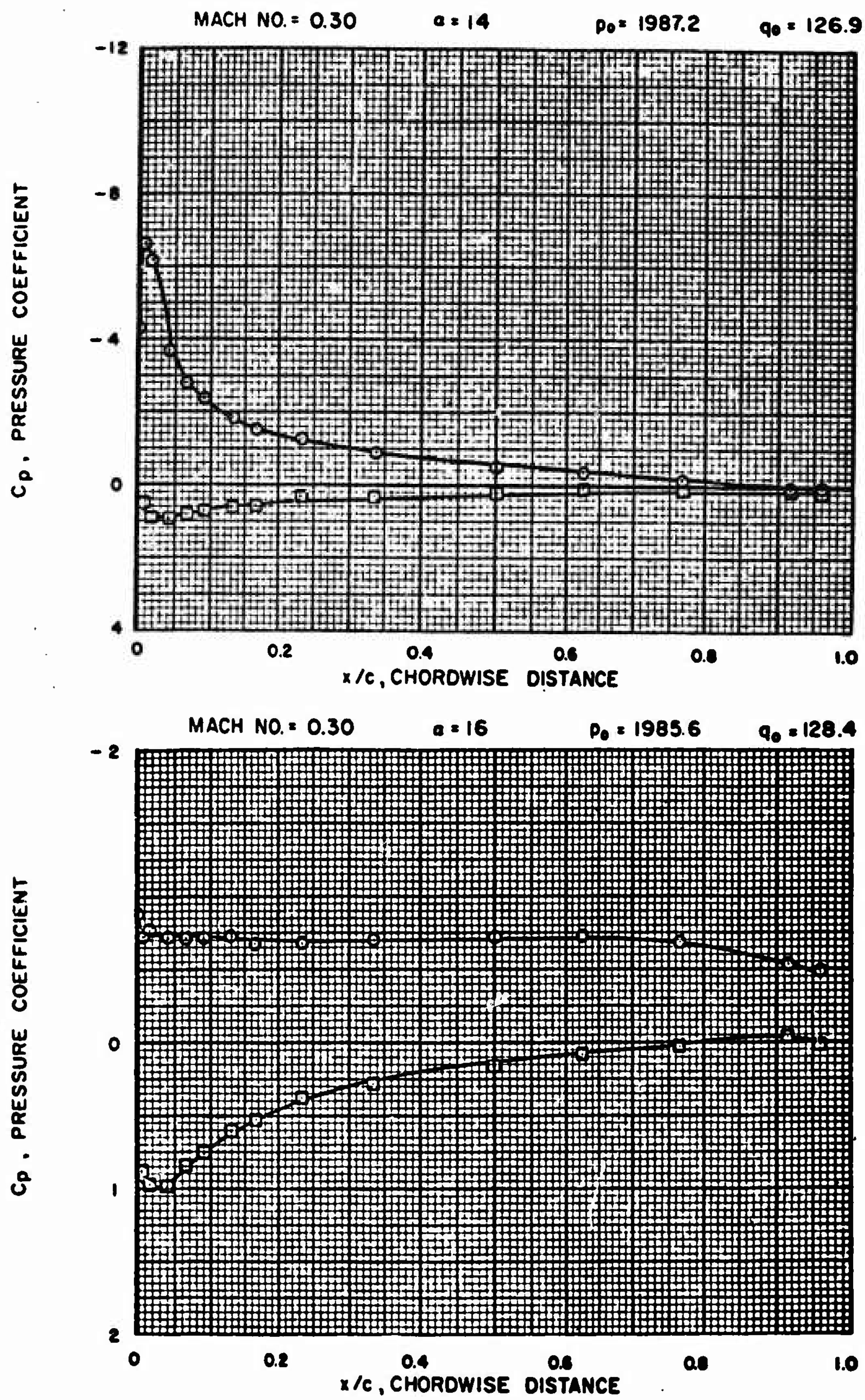
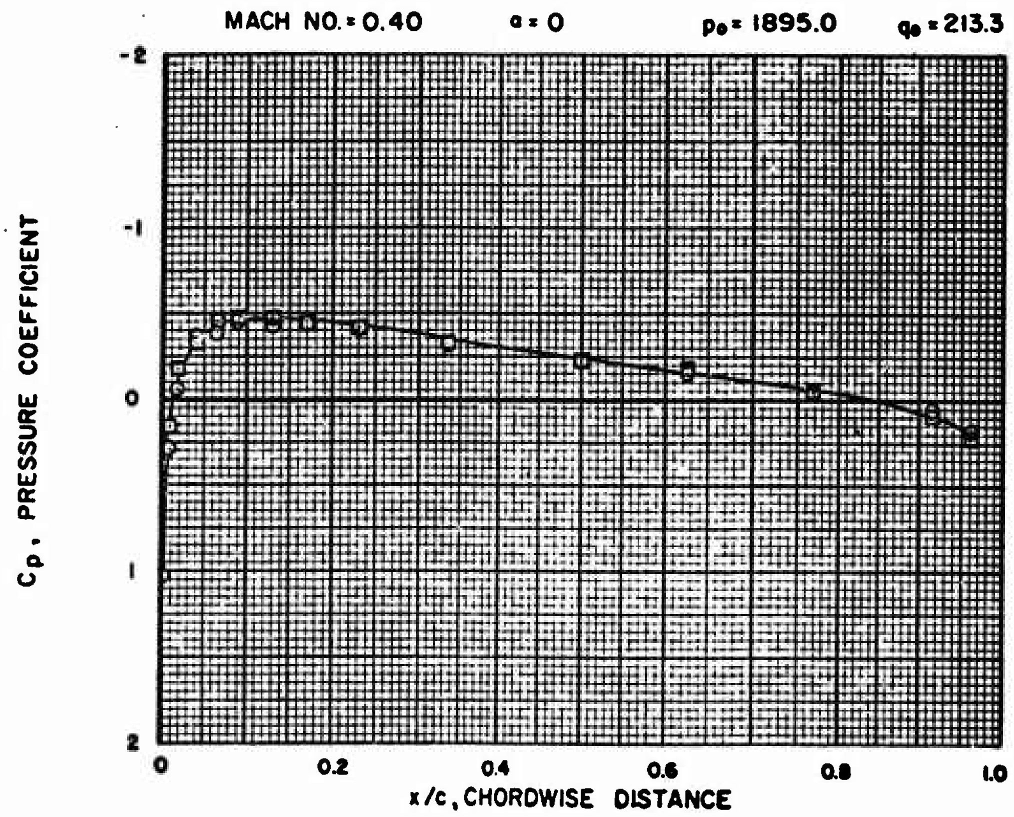


FIGURE 6 CHORDWISE PRESSURE COEFFICIENTS



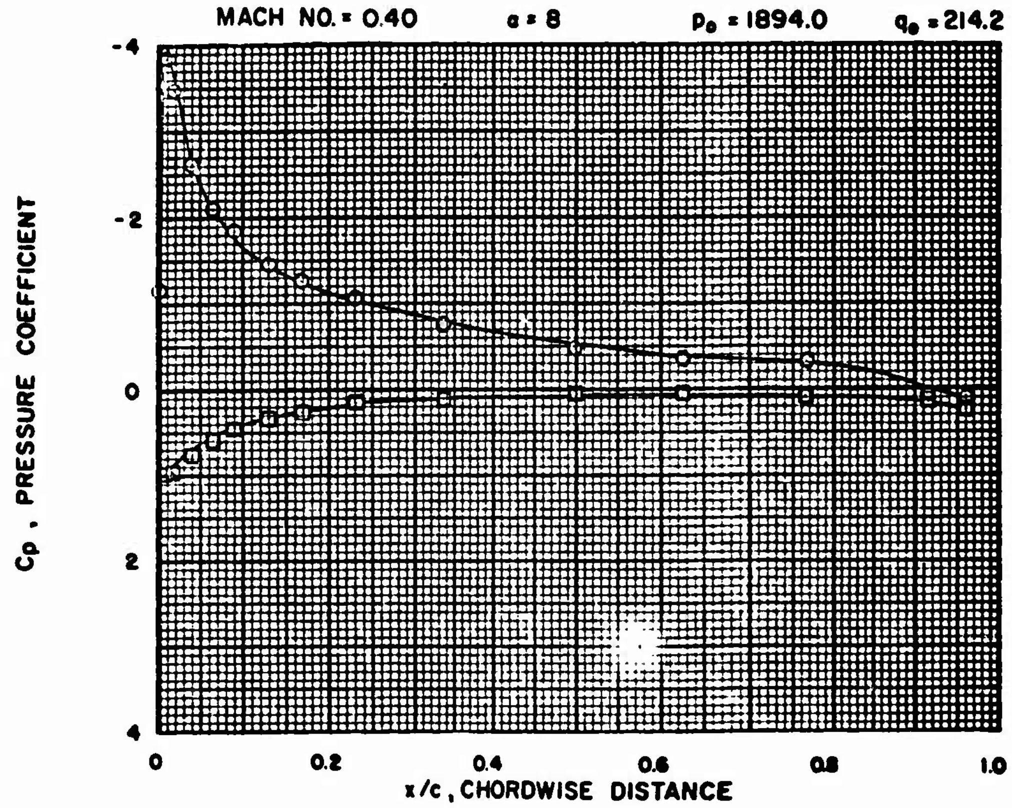
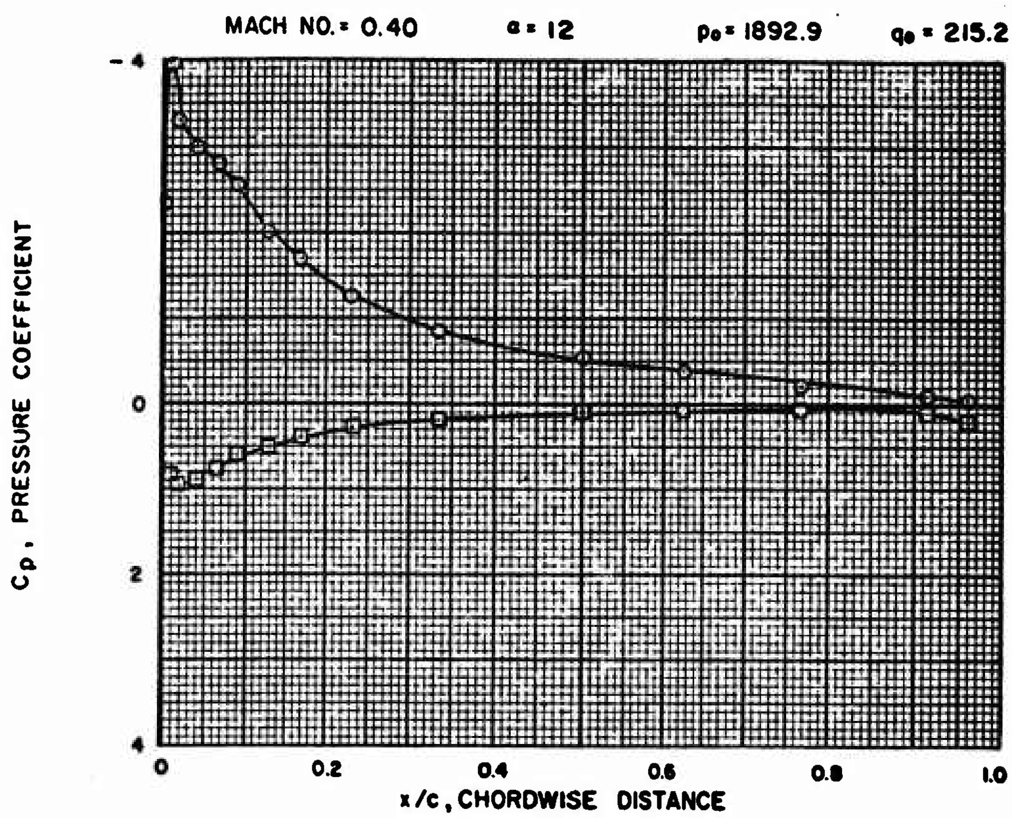


FIGURE 7 CHORDWISE PRESSURE COEFFICIENTS



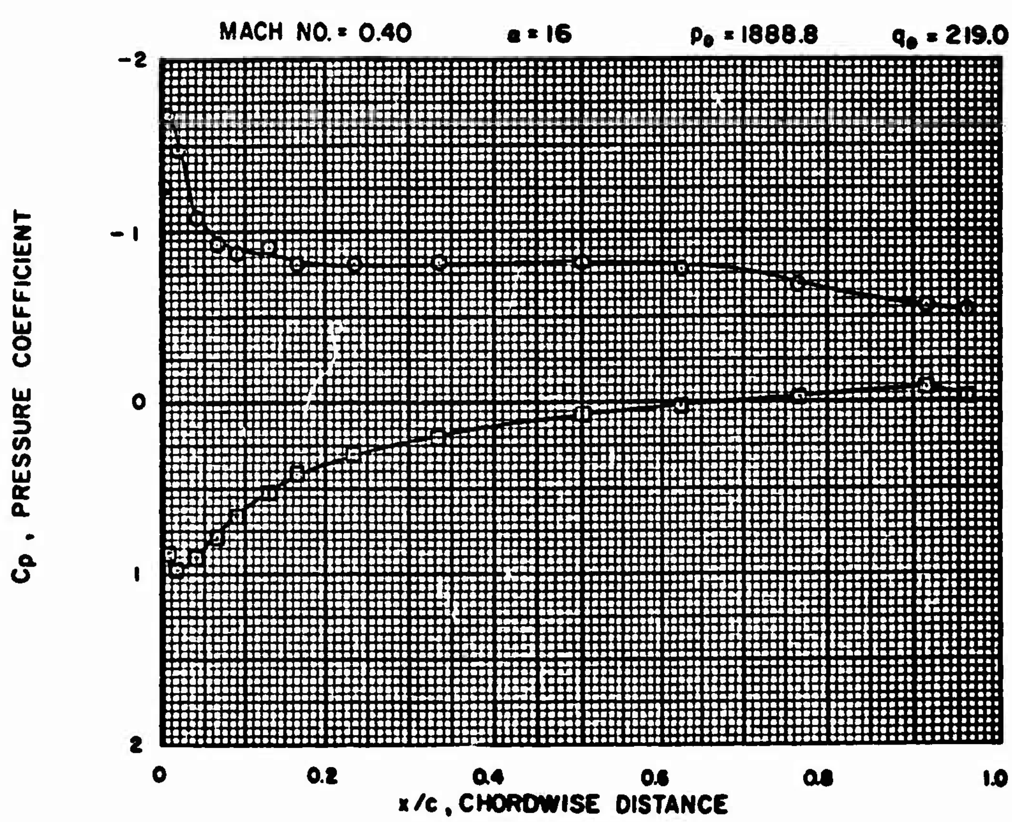
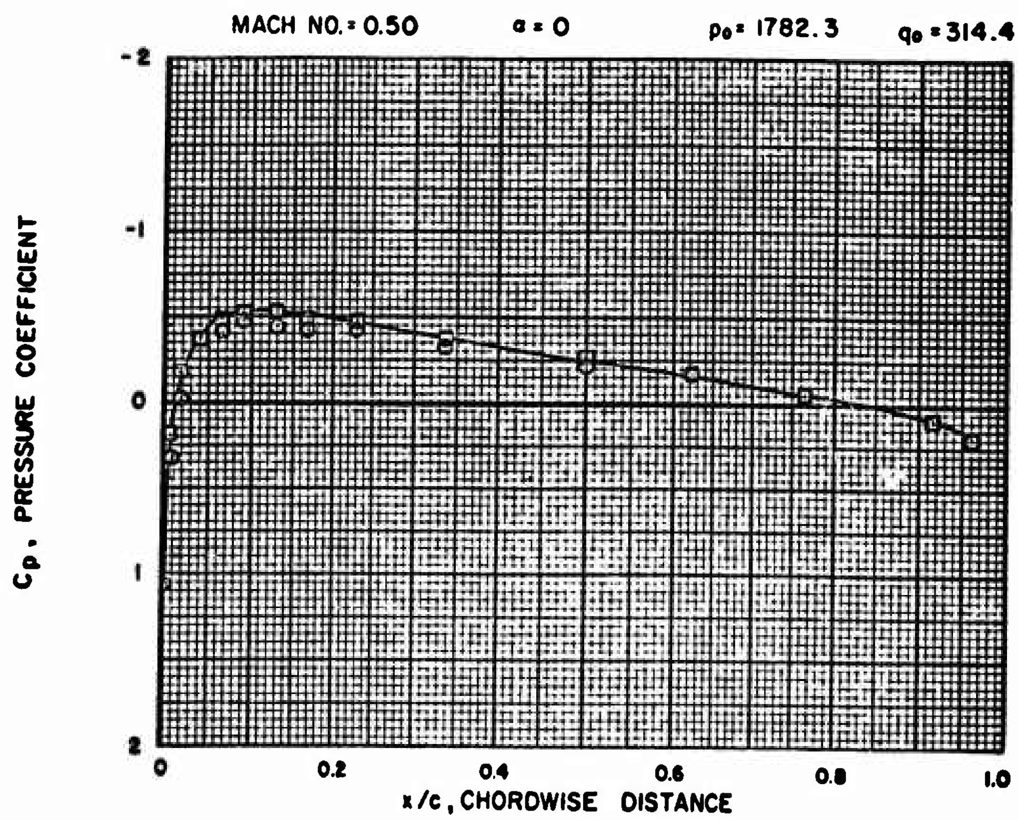


FIGURE 8 CHORDWISE PRESSURE COEFFICIENTS



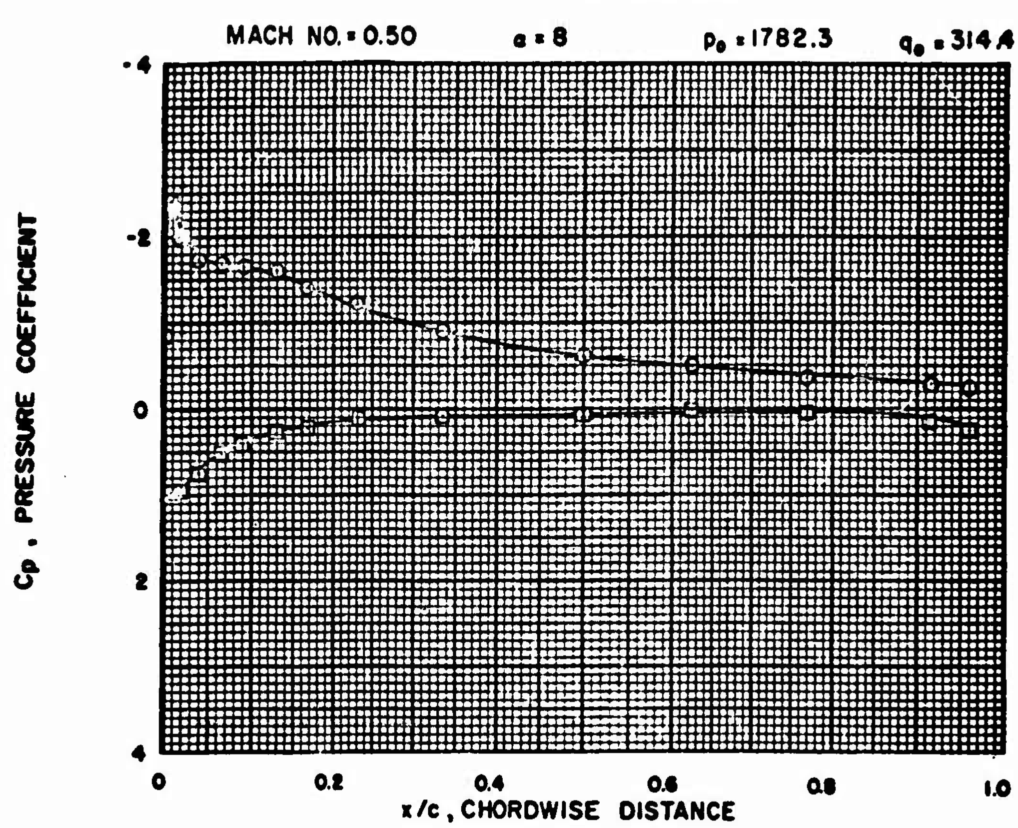
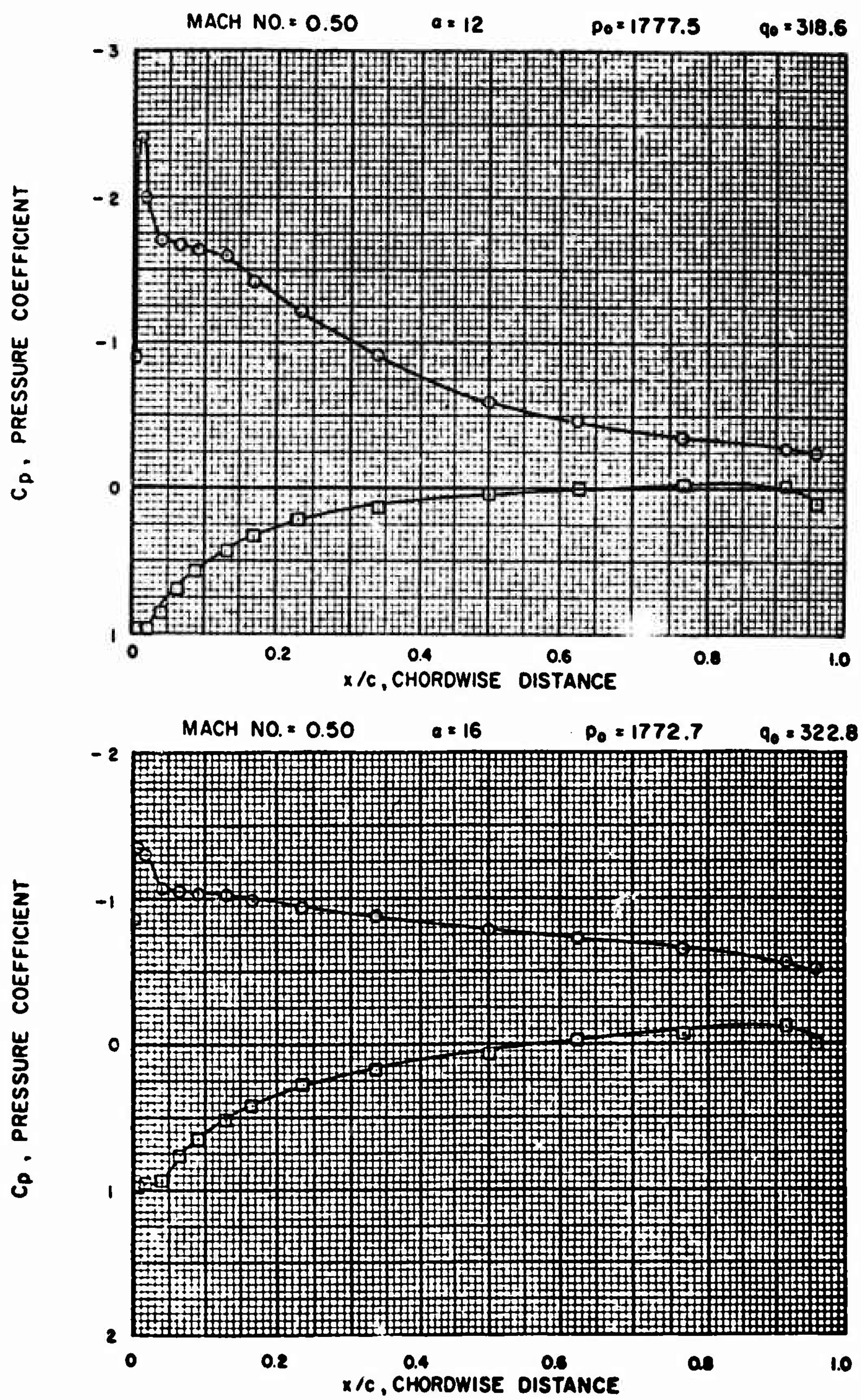


FIGURE 9 CHORDWISE PRESSURE COEFFICIENTS



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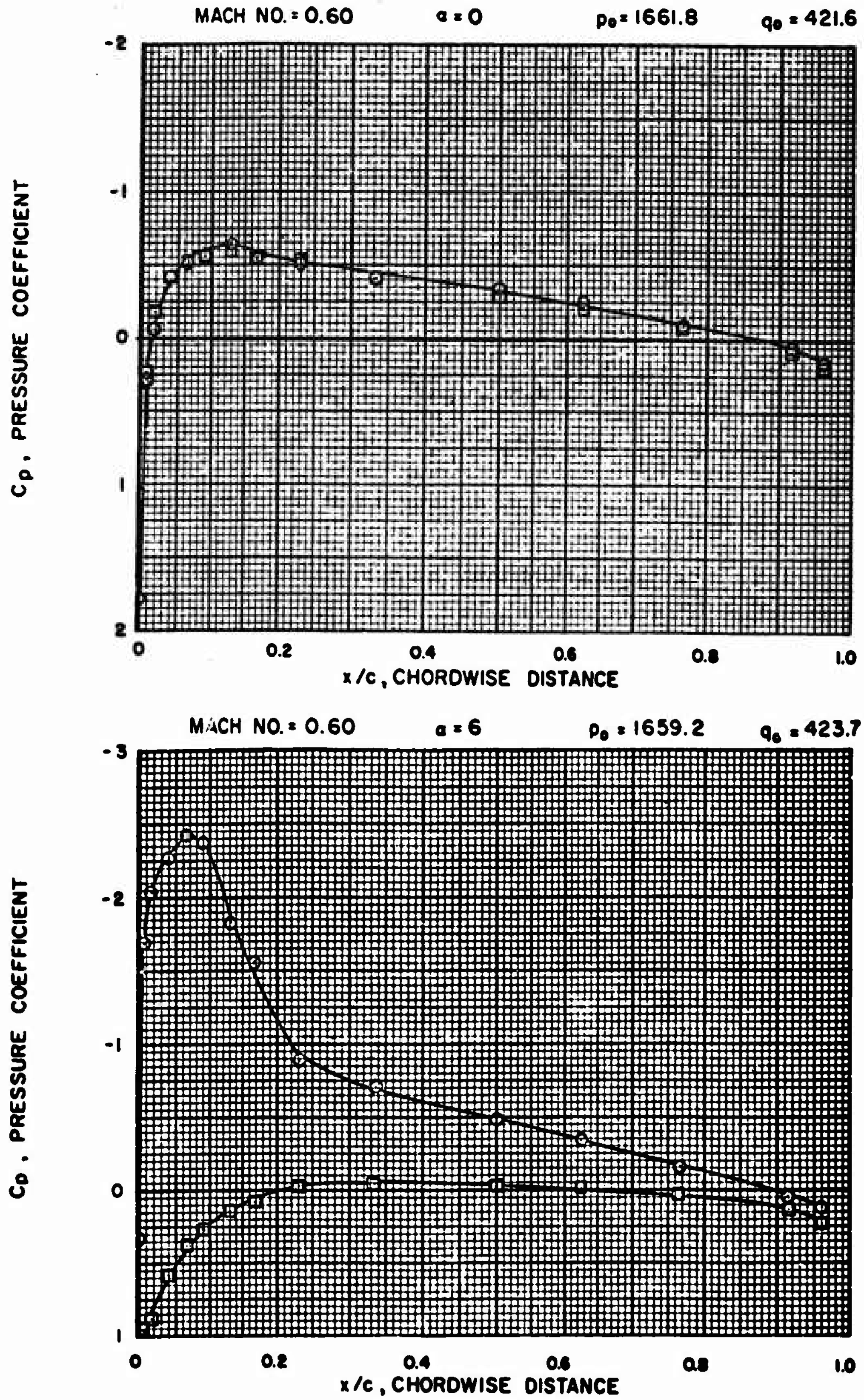

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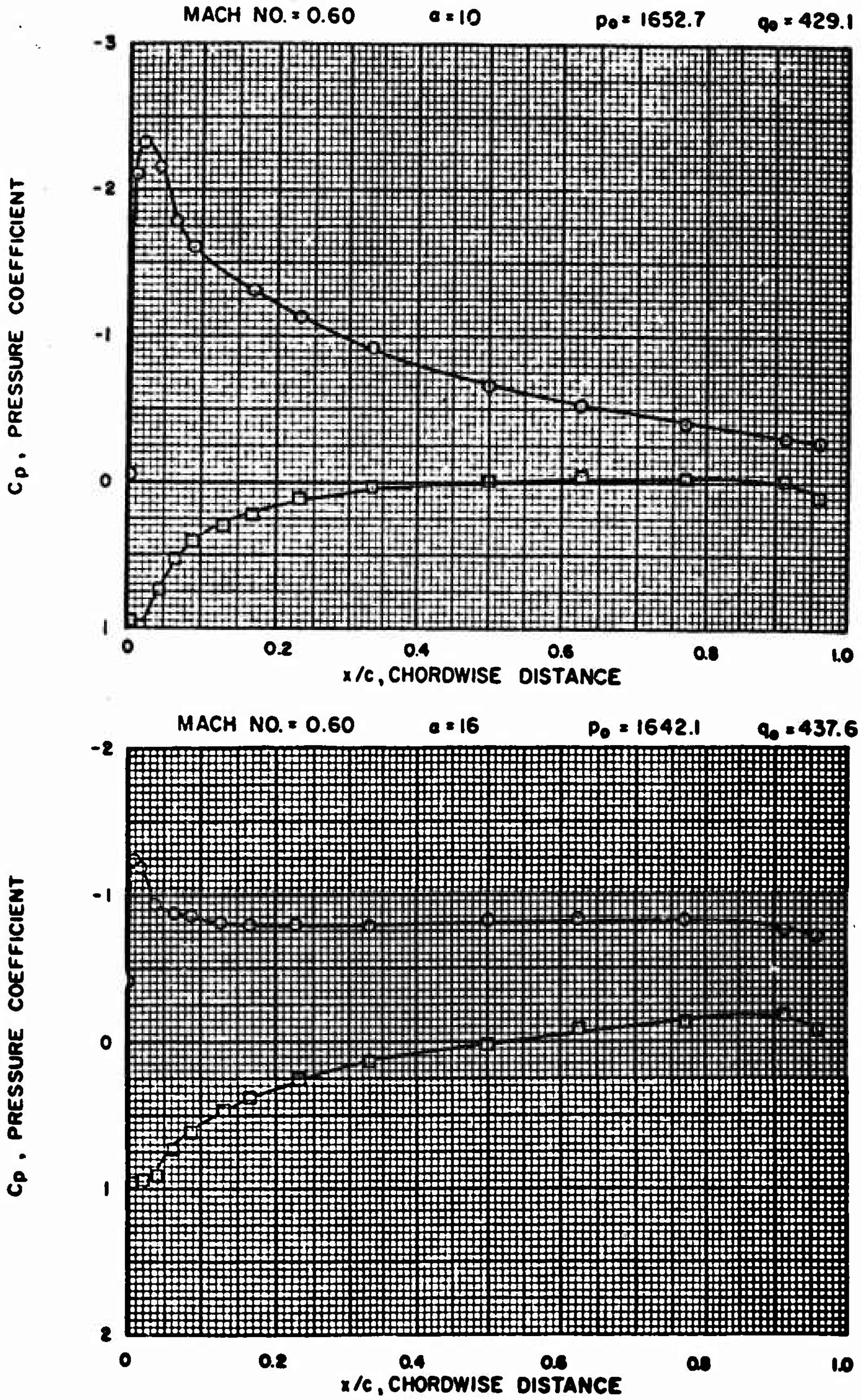
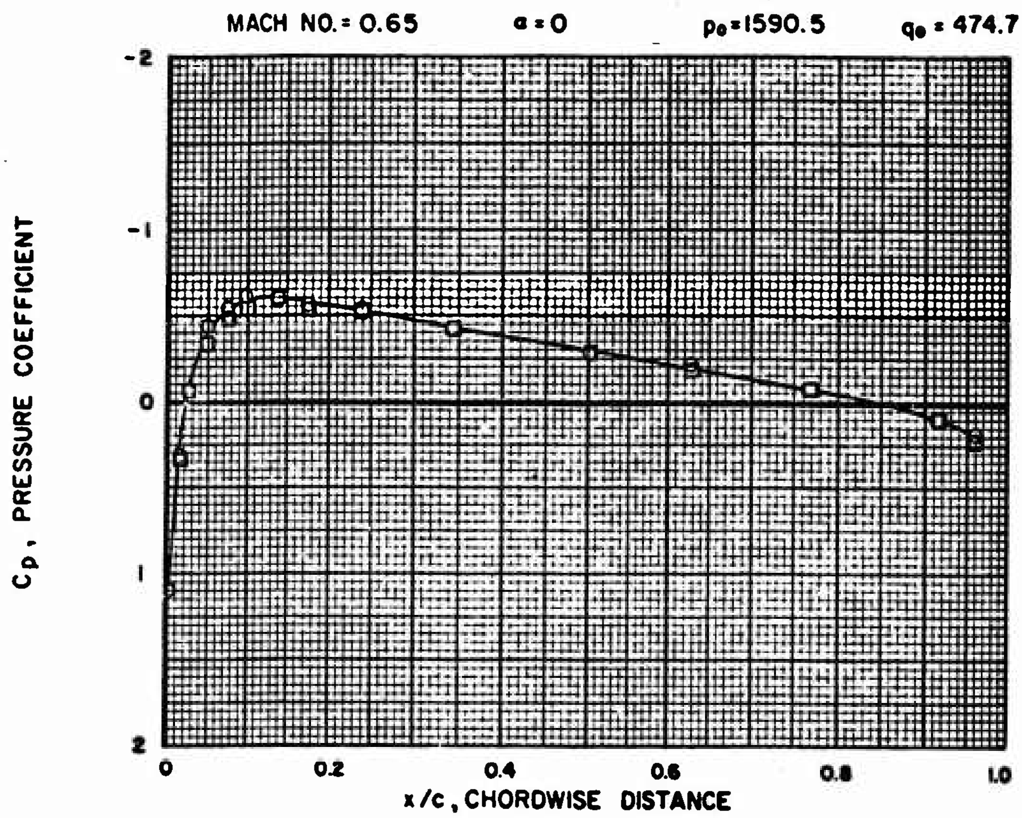
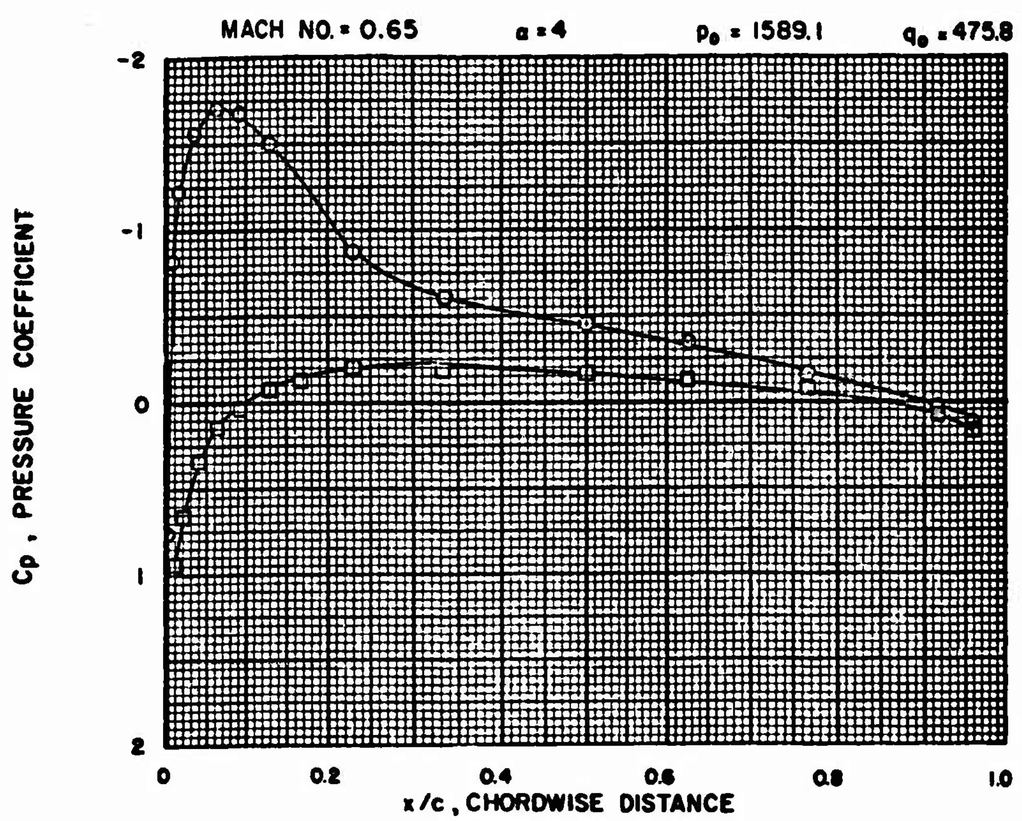


FIGURE 12 CHORDWISE PRESSURE COEFFICIENTS





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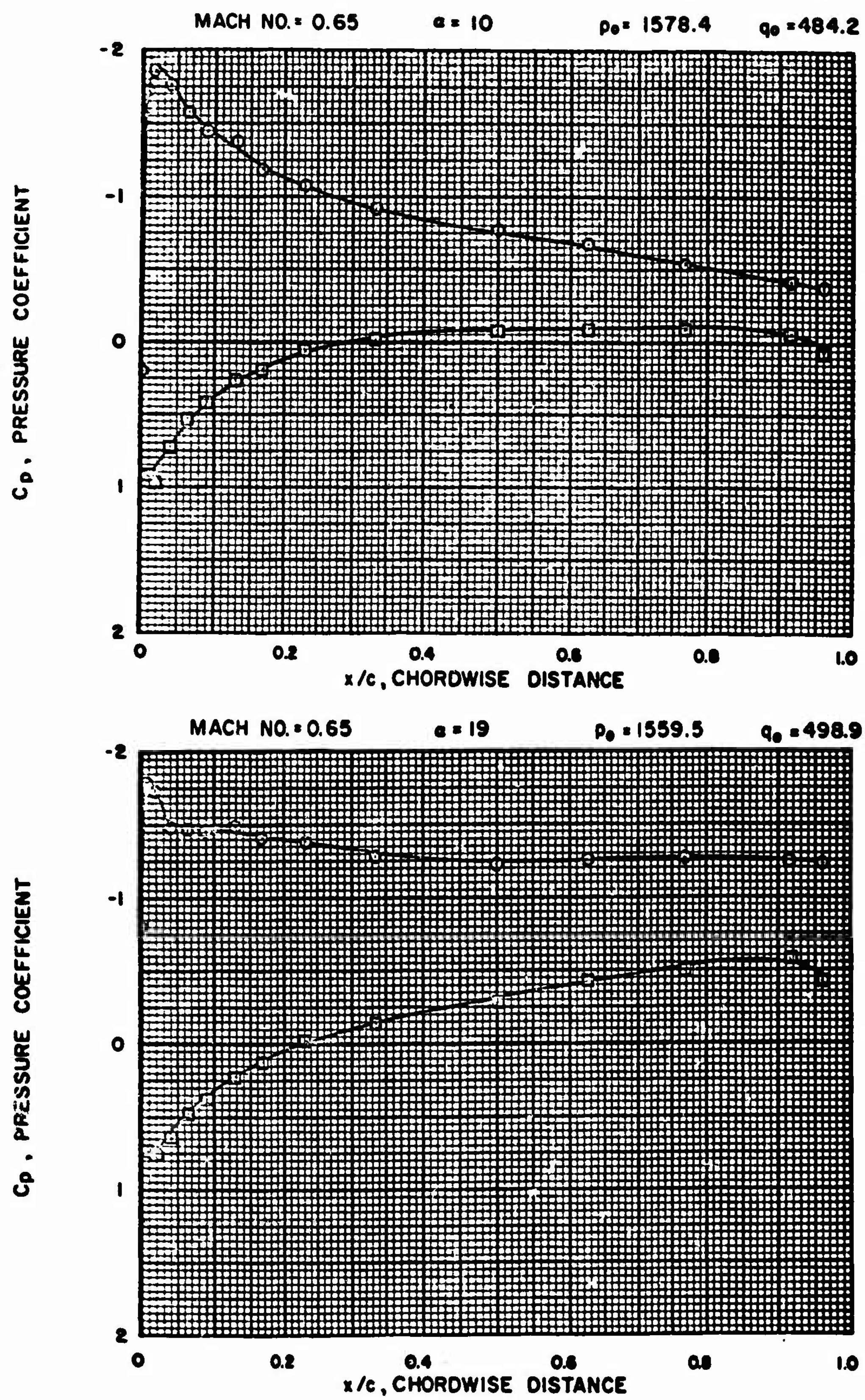

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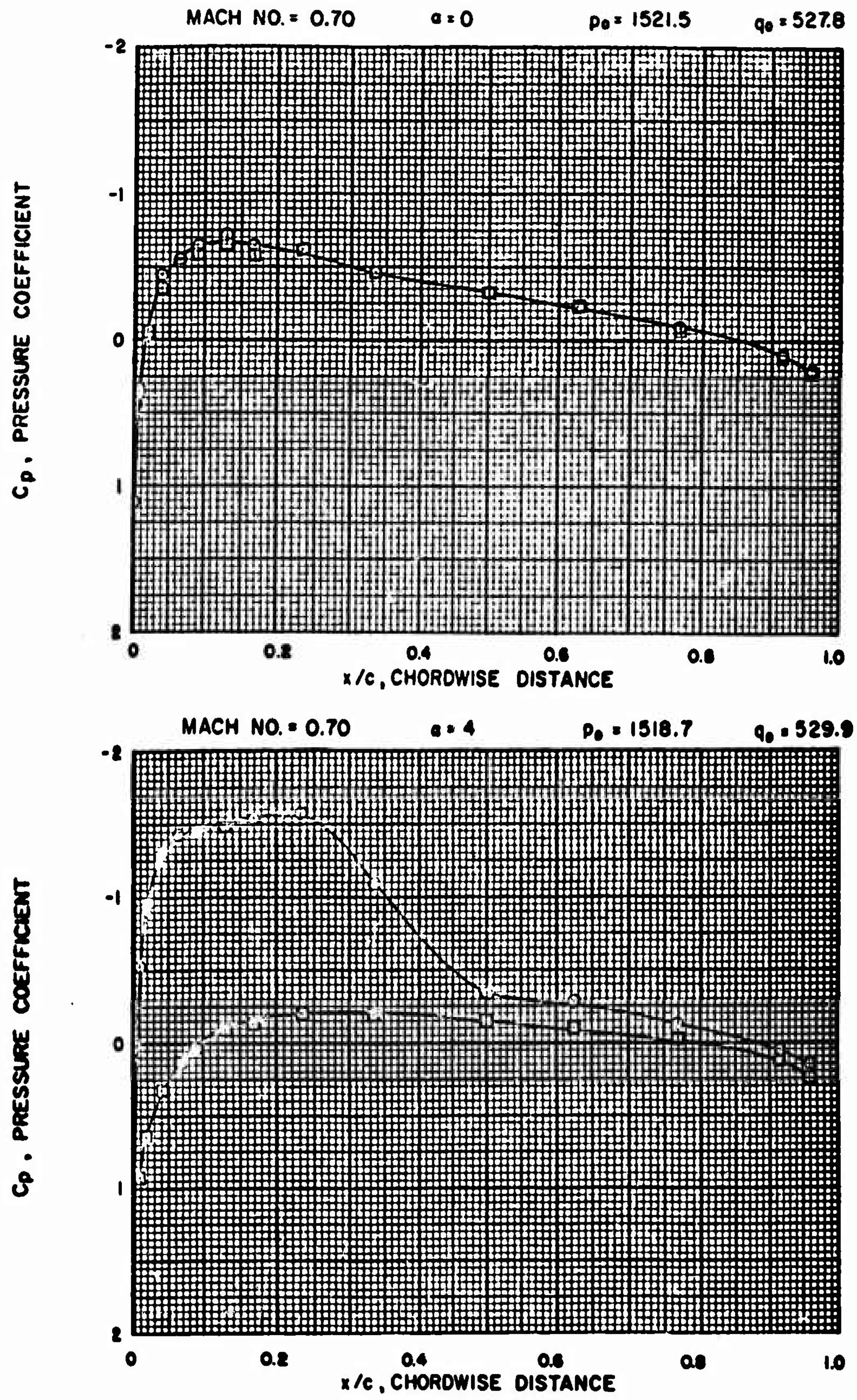
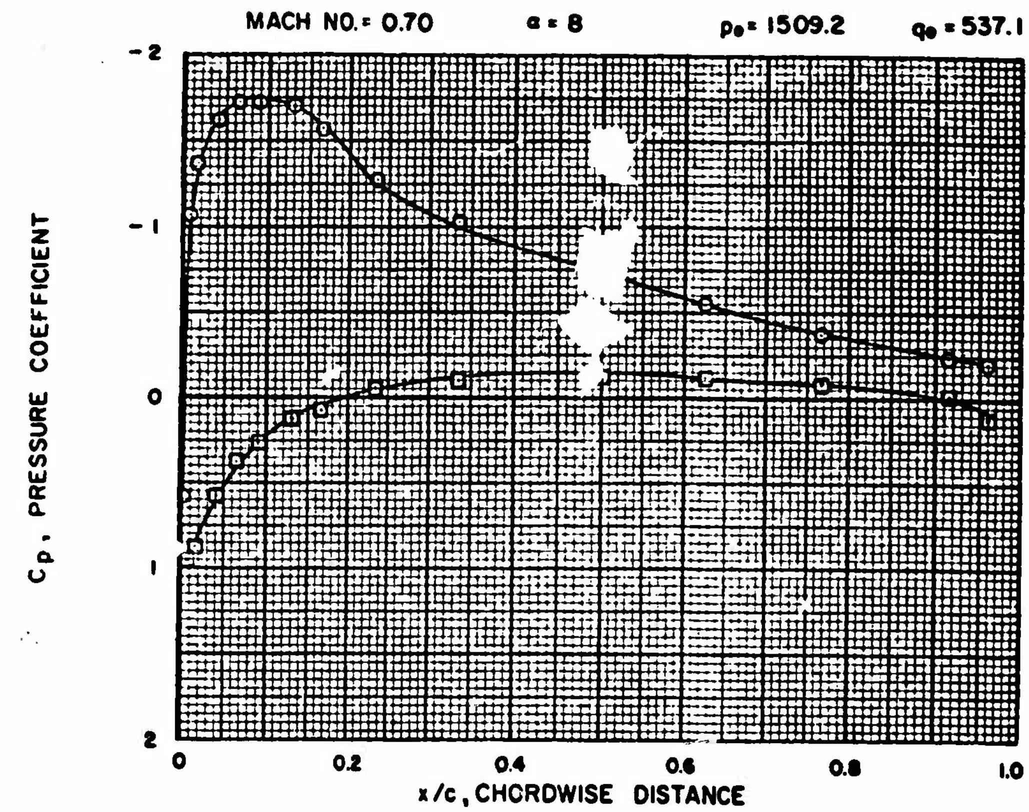
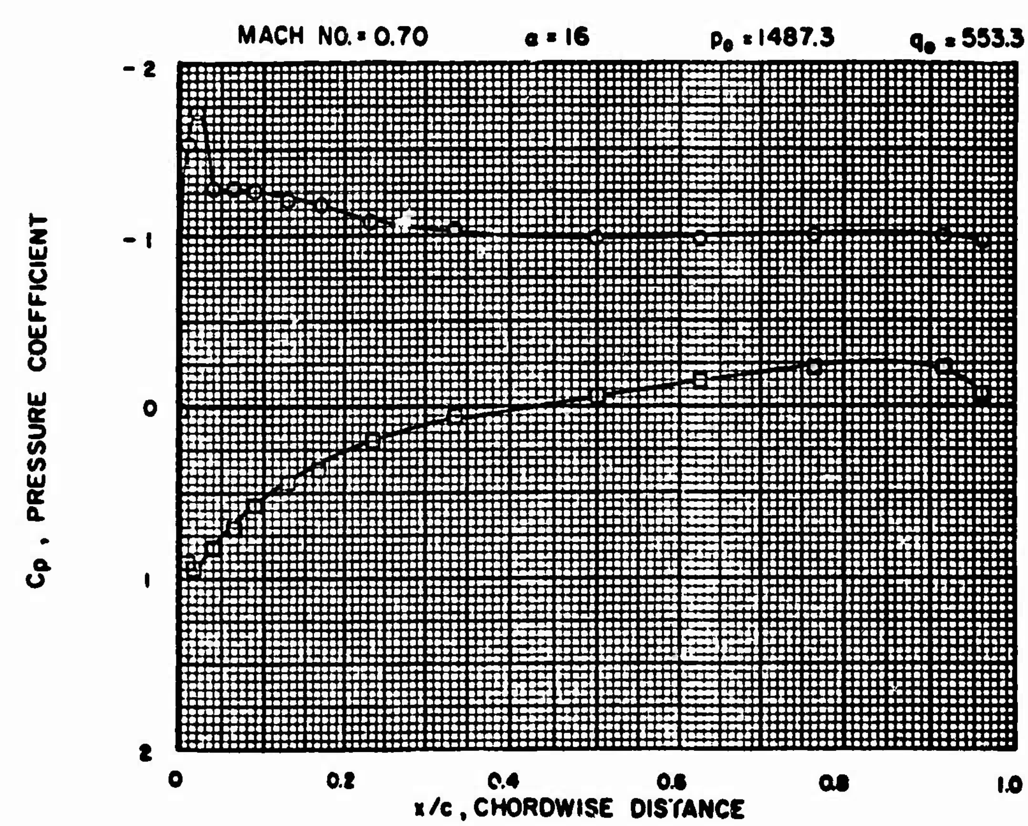


FIGURE 15 CHORDWISE PRESSURE COEFFICIENTS





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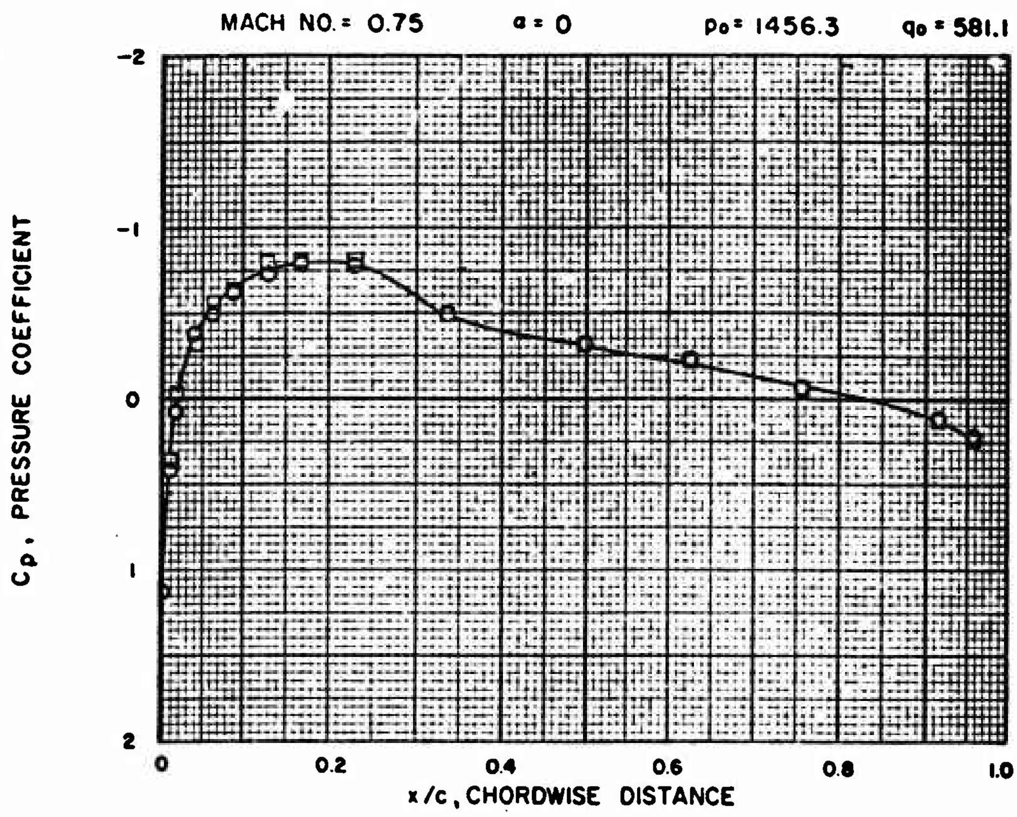

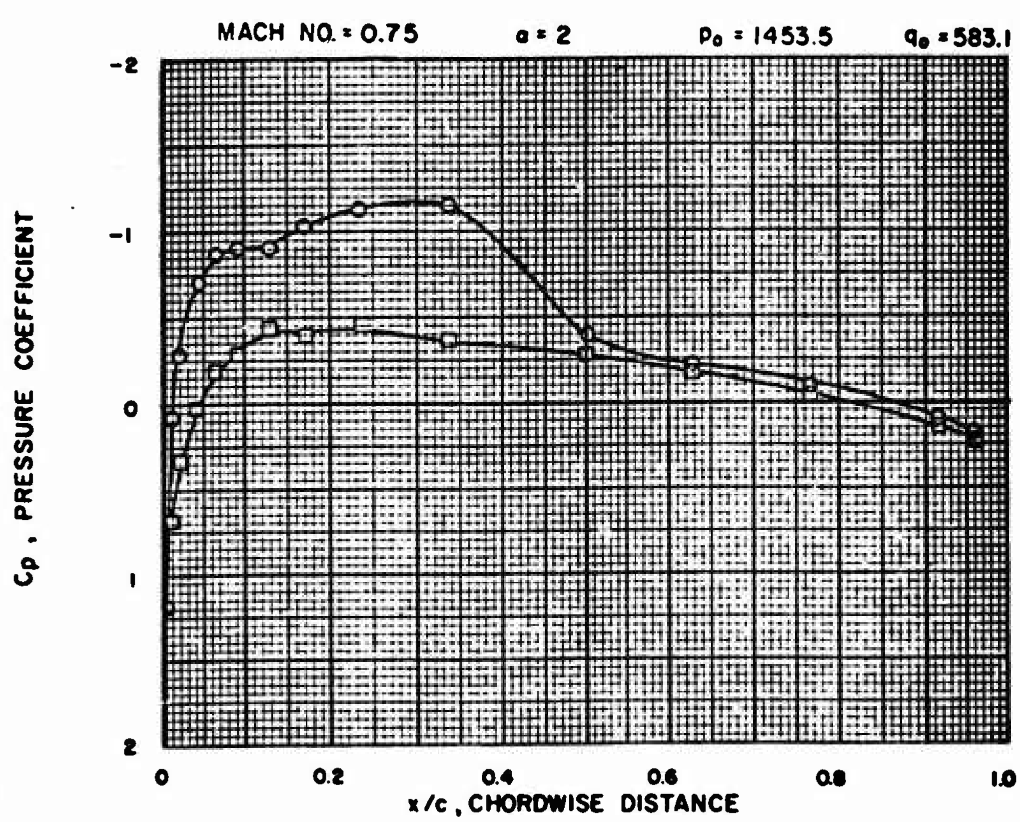

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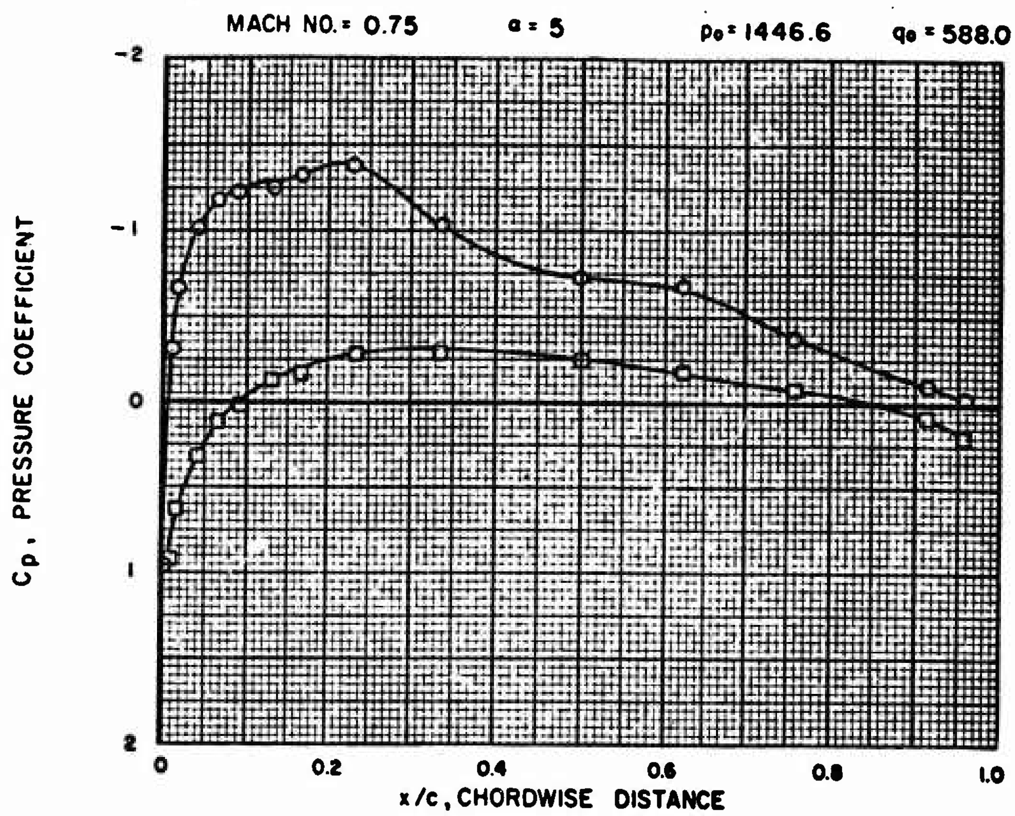

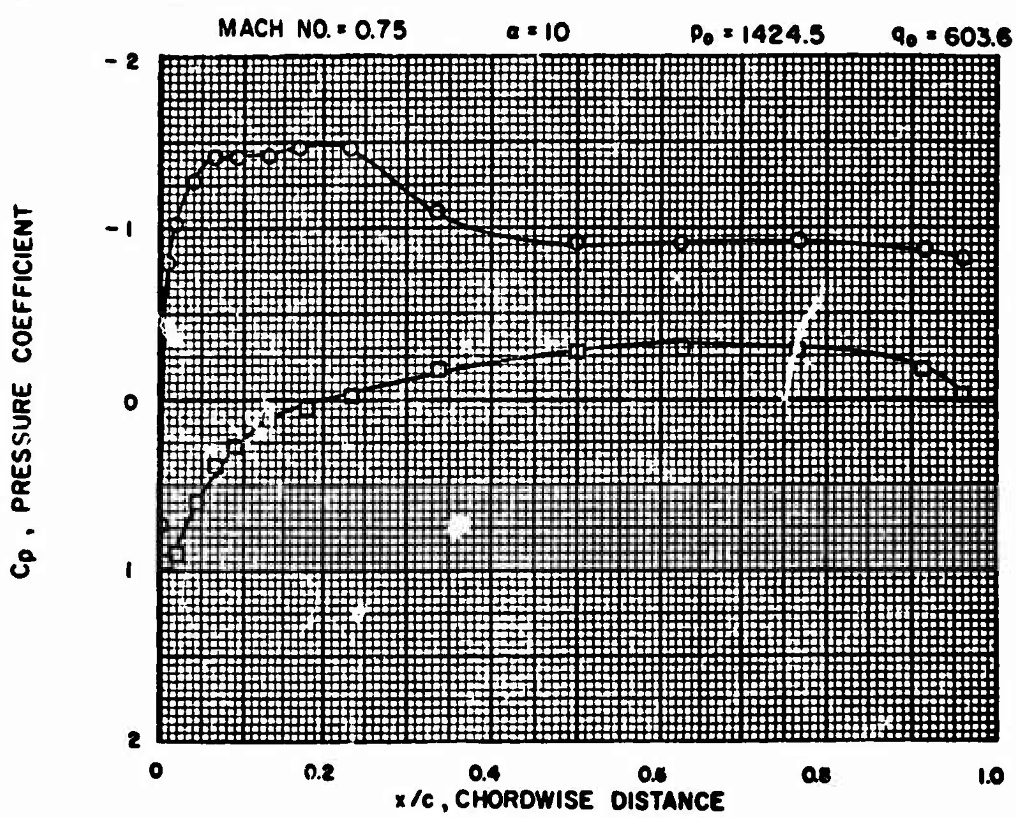

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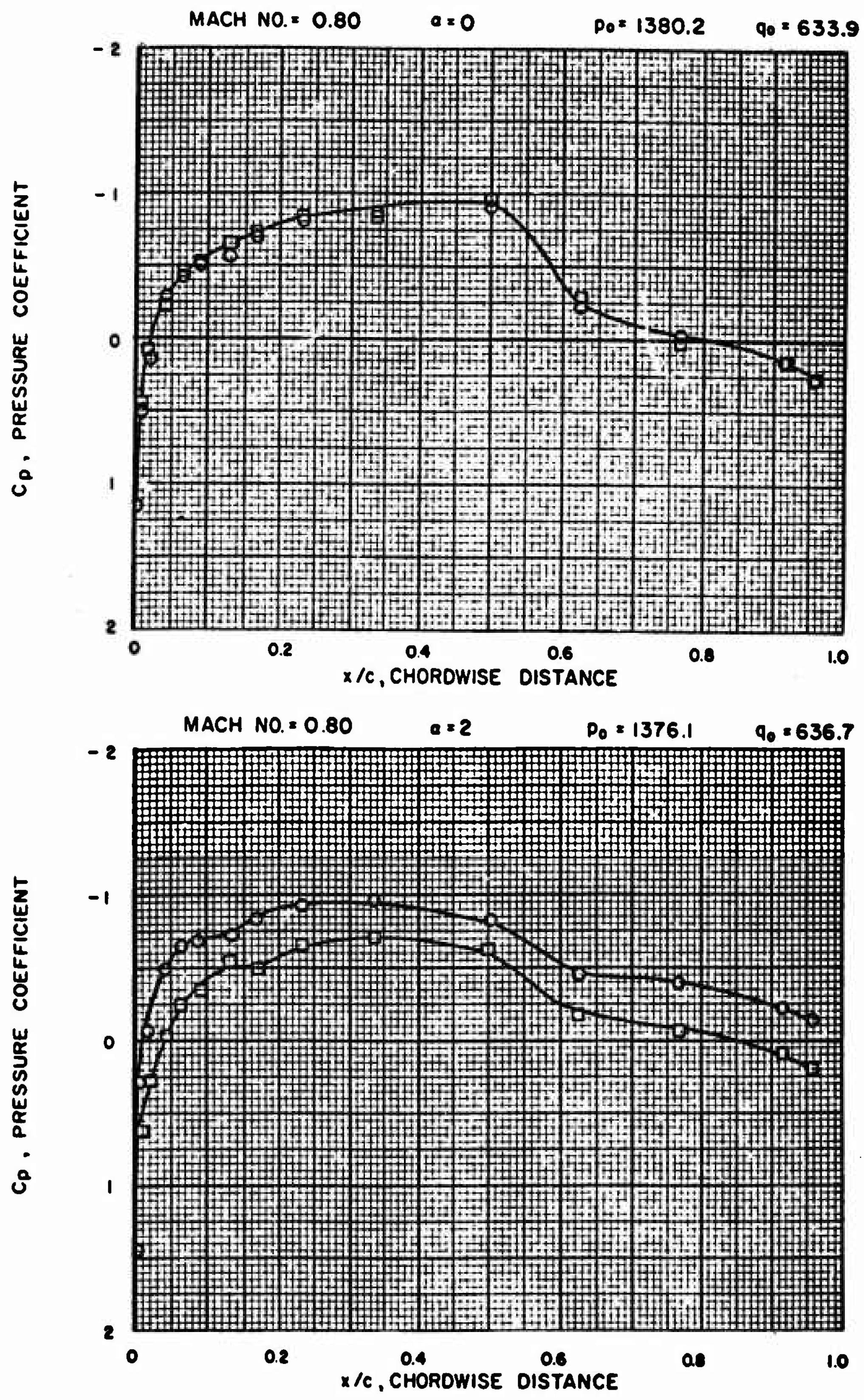
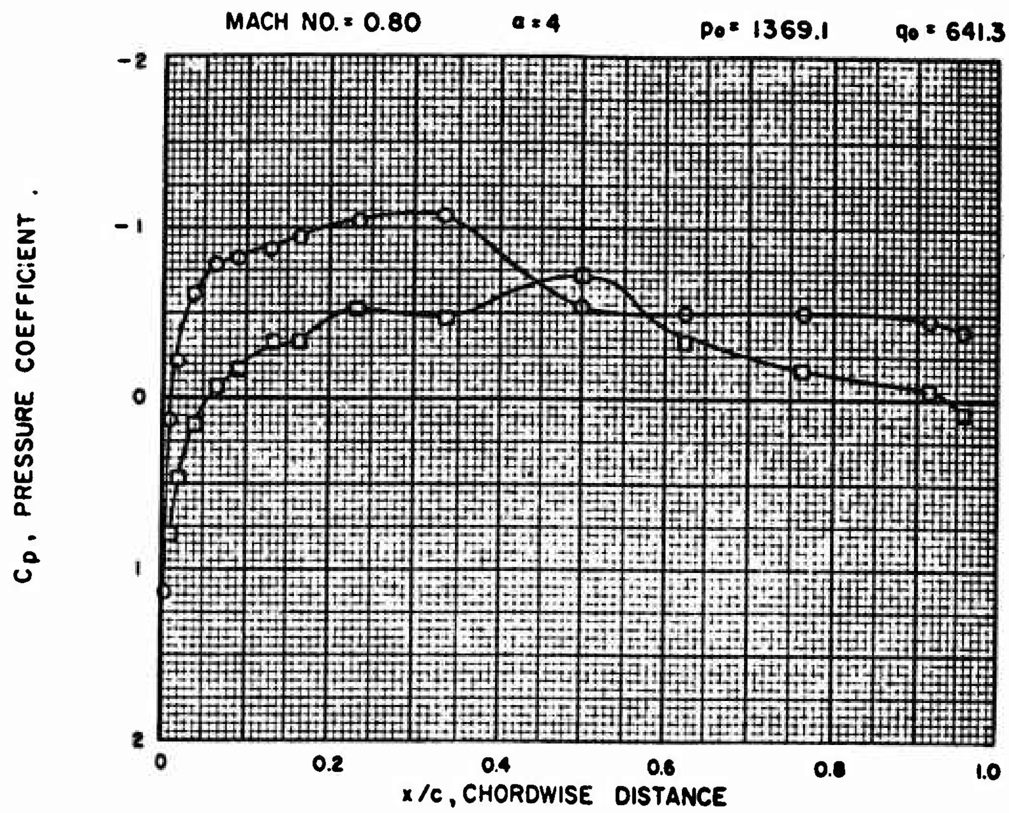
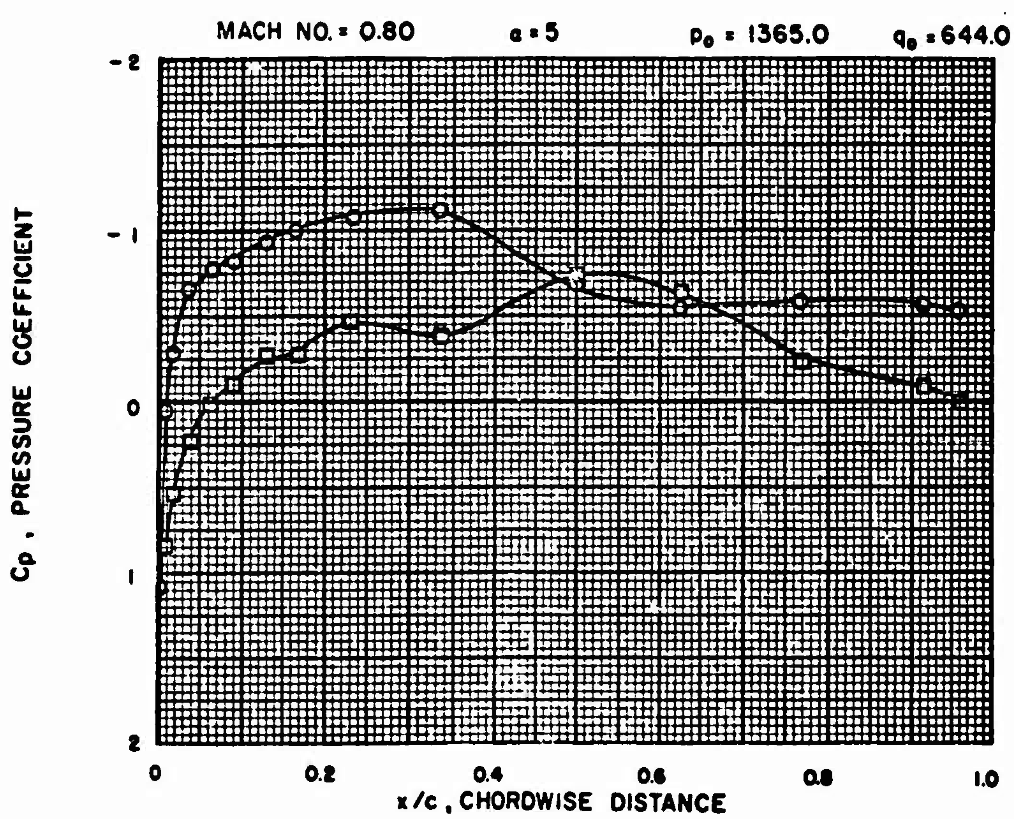


FIGURE 19 CHORDWISE PRESSURE COEFFICIENTS





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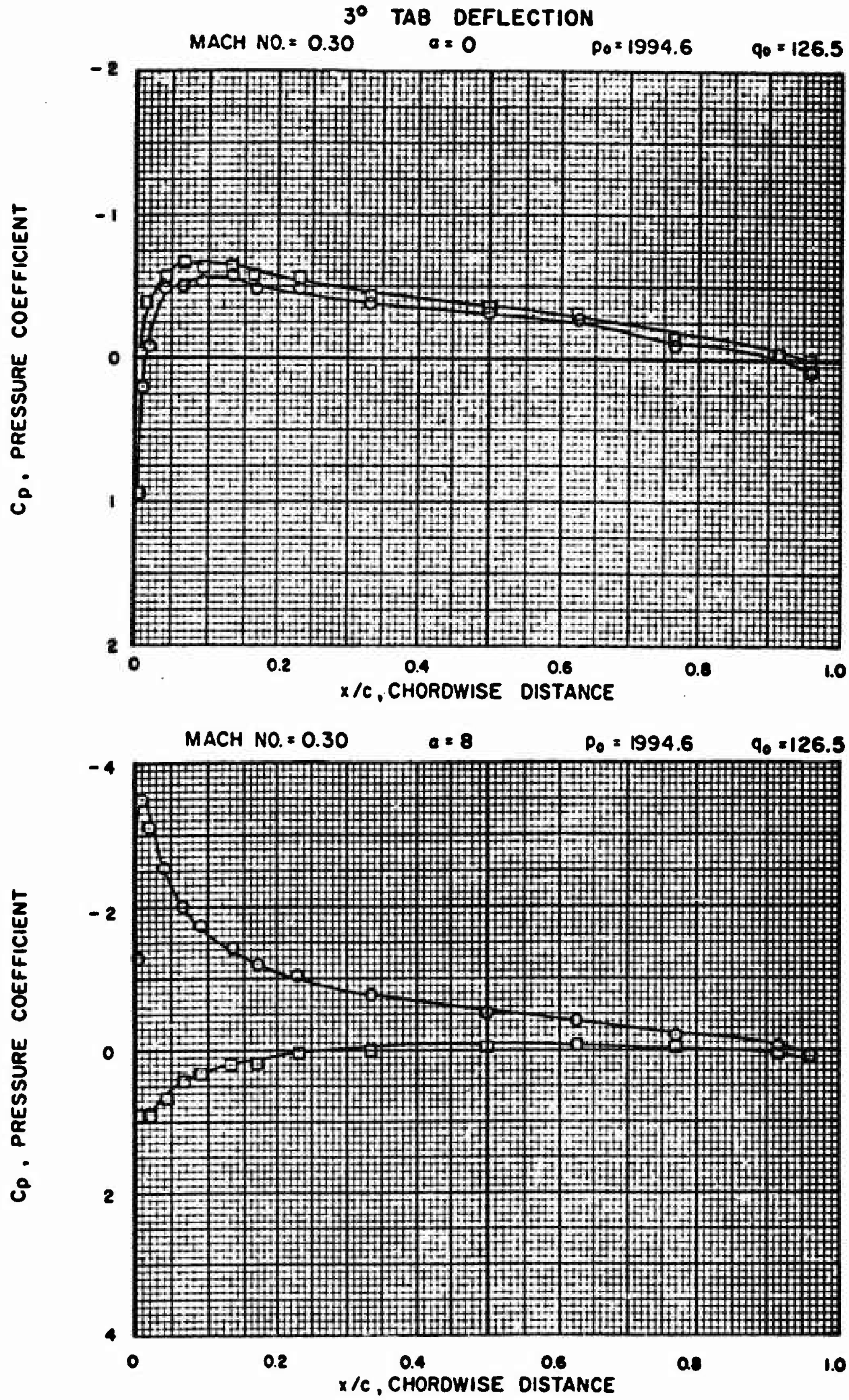
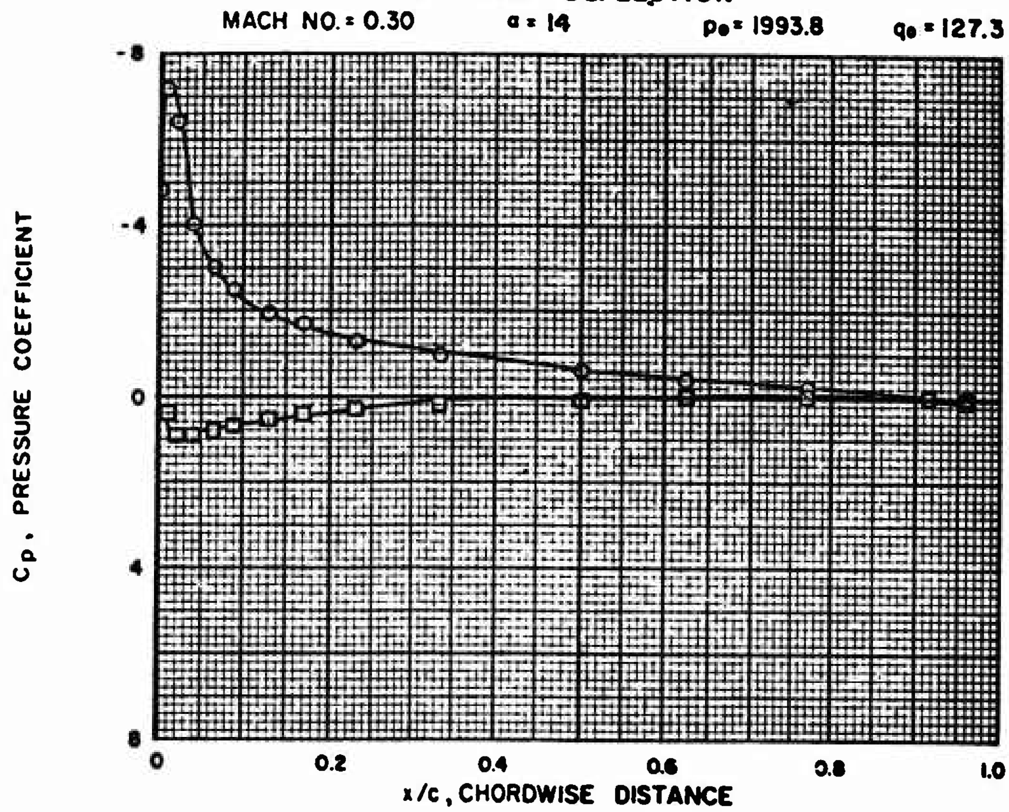
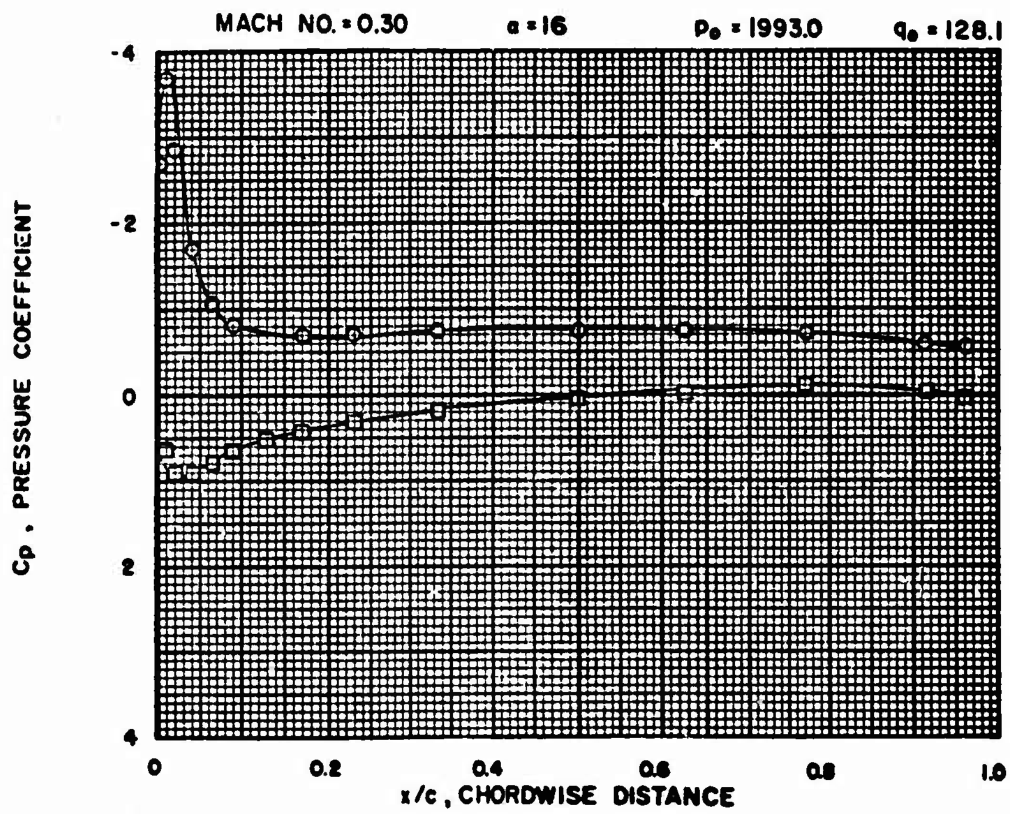


FIGURE 21 CHORDWISE PRESSURE COEFFICIENTS

3° TAB DEFLECTION





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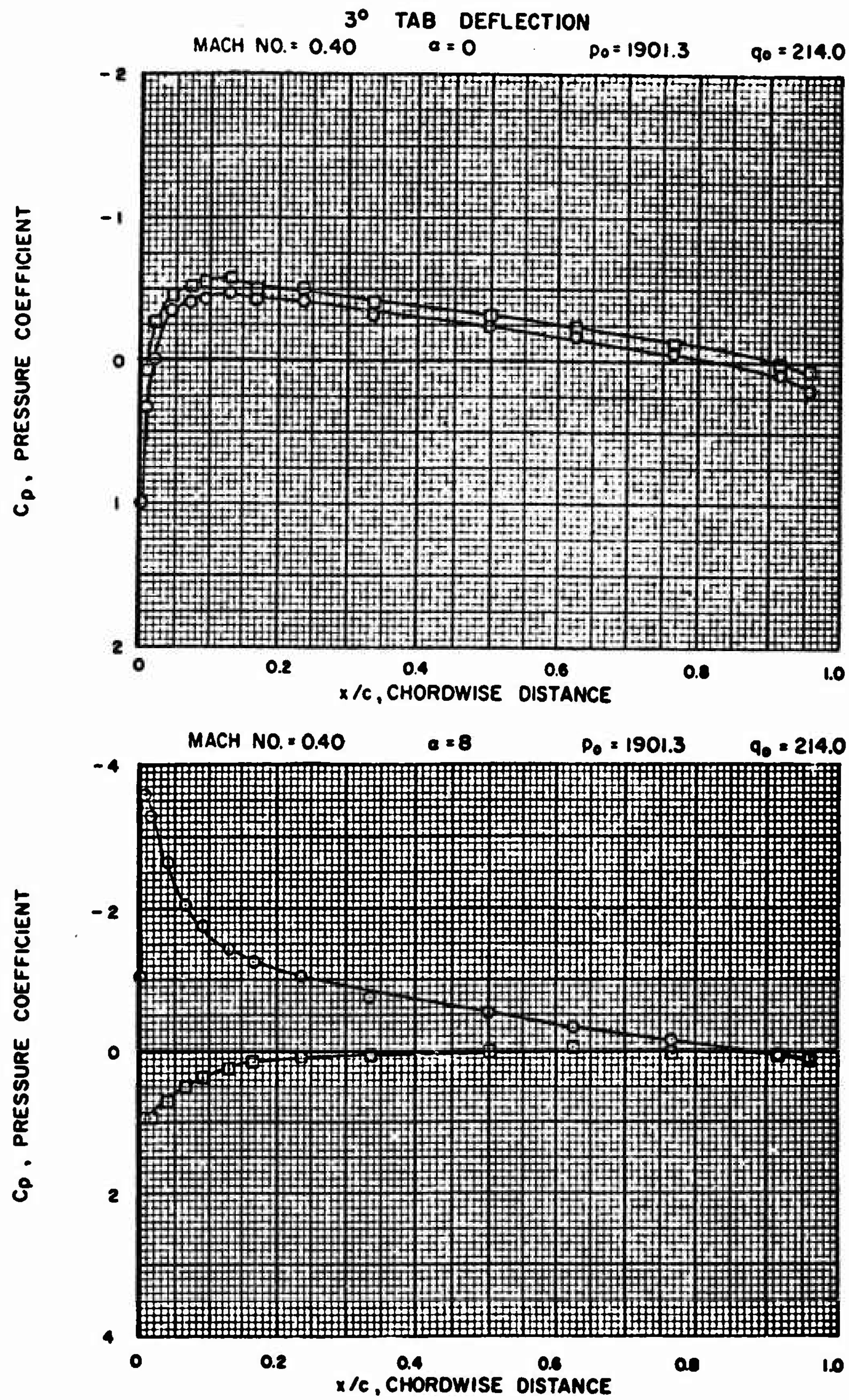

FIGURE 23 CHORDWISE PRESSURE COEFFICIENTS

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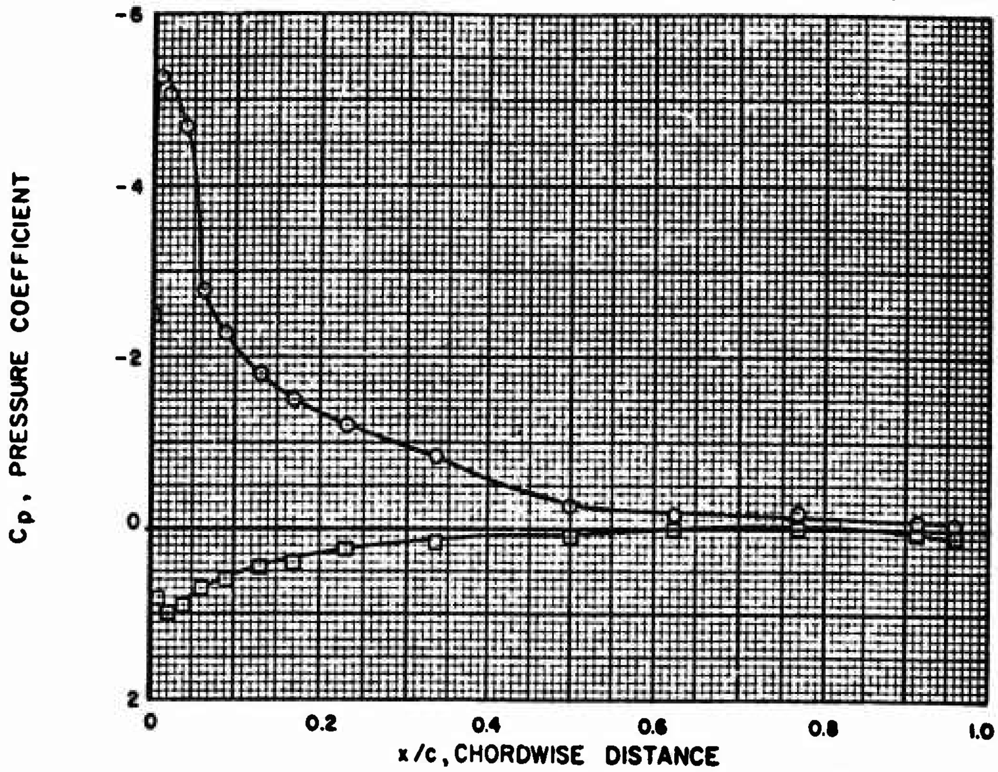

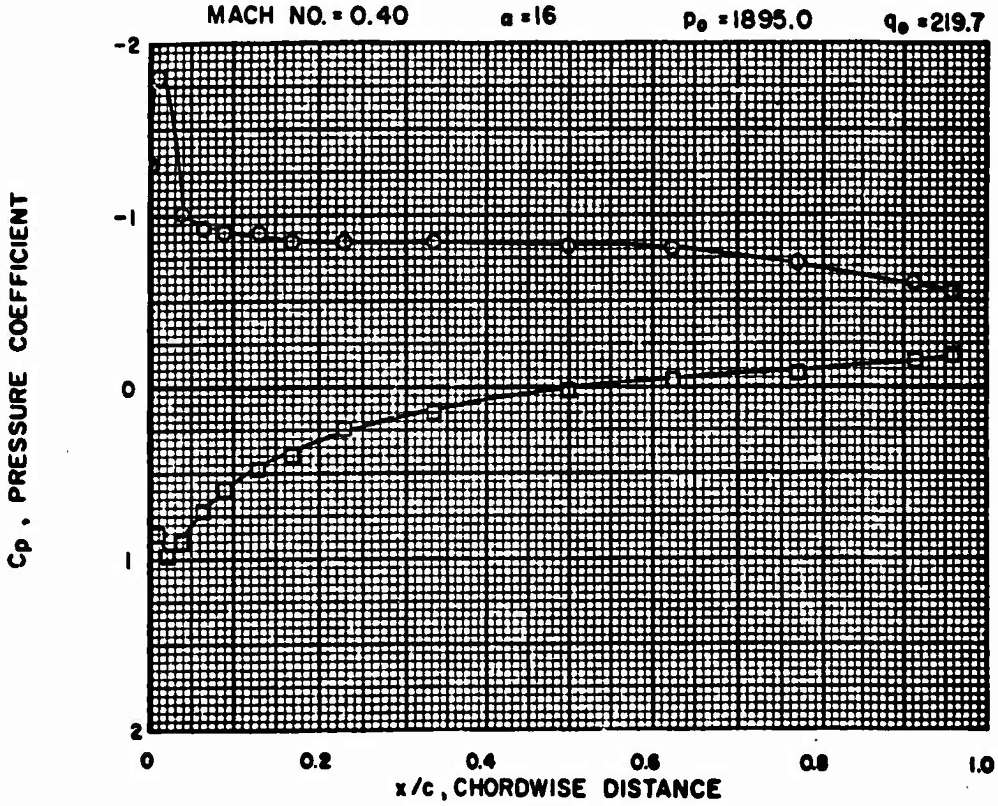

FIGURE 24 CHORDWISE PRESSURE COEFFICIENTS

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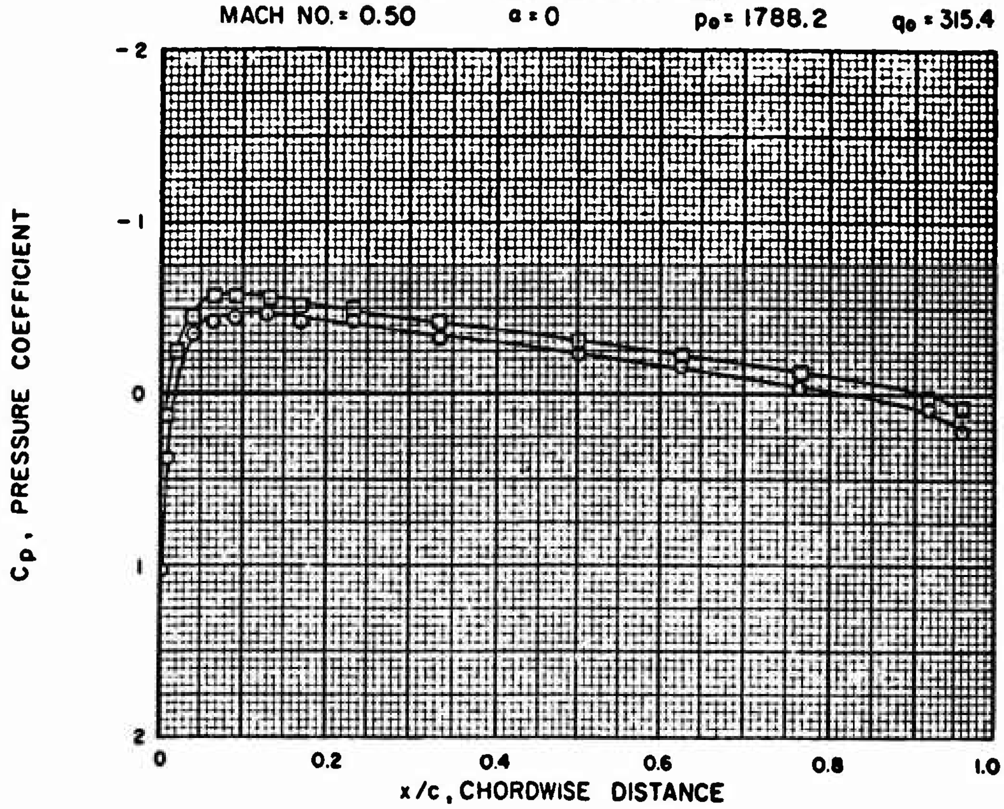


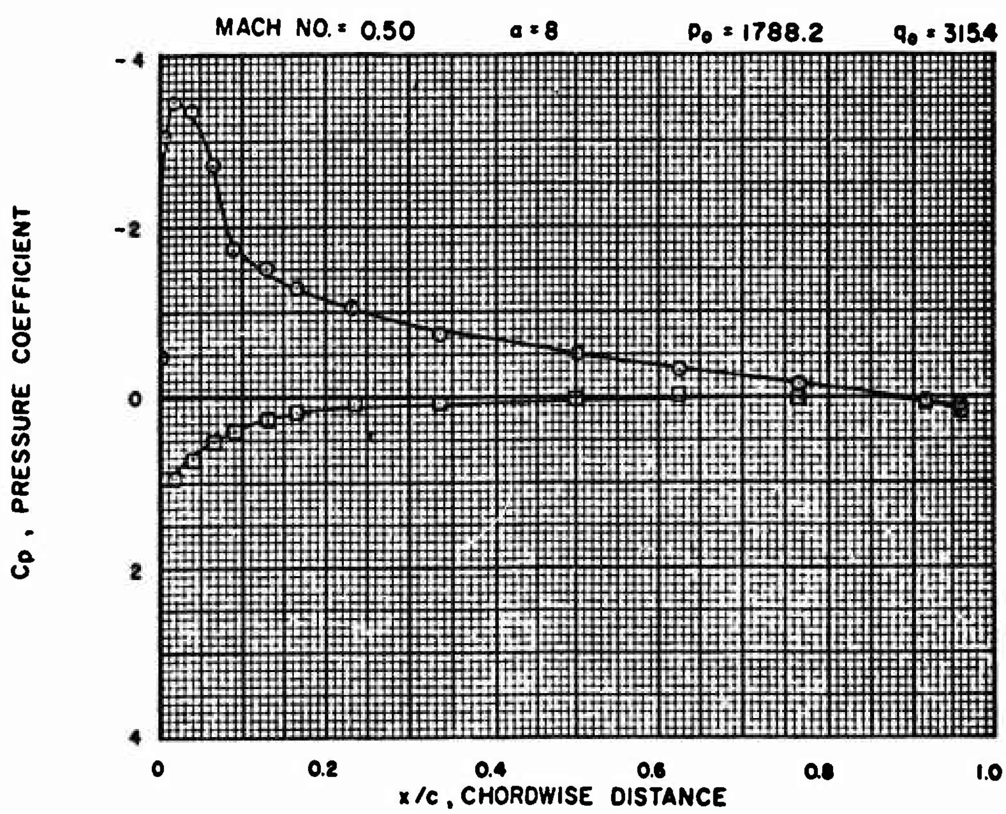


FIGURE 25 CHORDWISE PRESSURE COEFFICIENTS

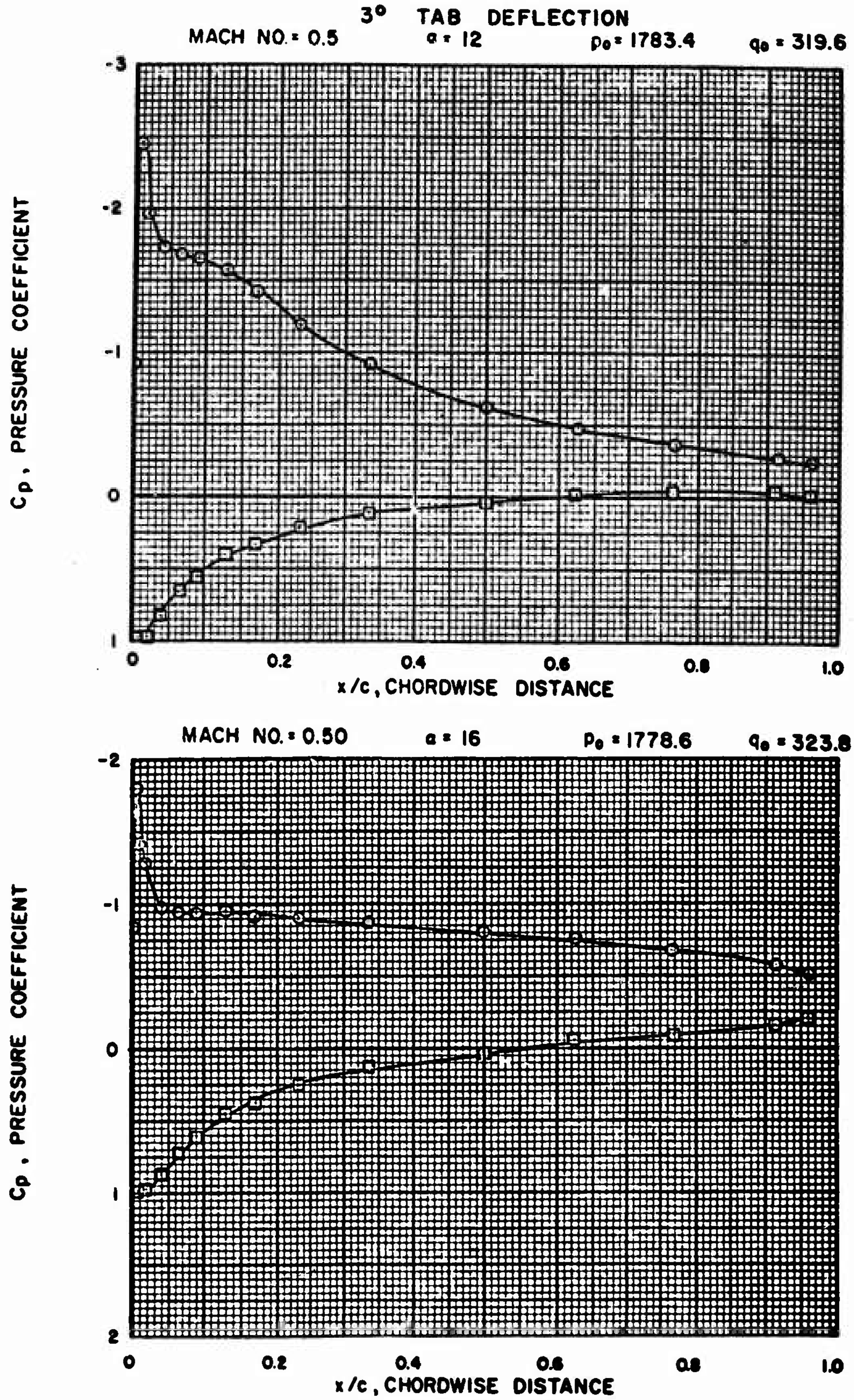


FIGURE 26 CHORDWISE PRESSURE COEFFICIENTS

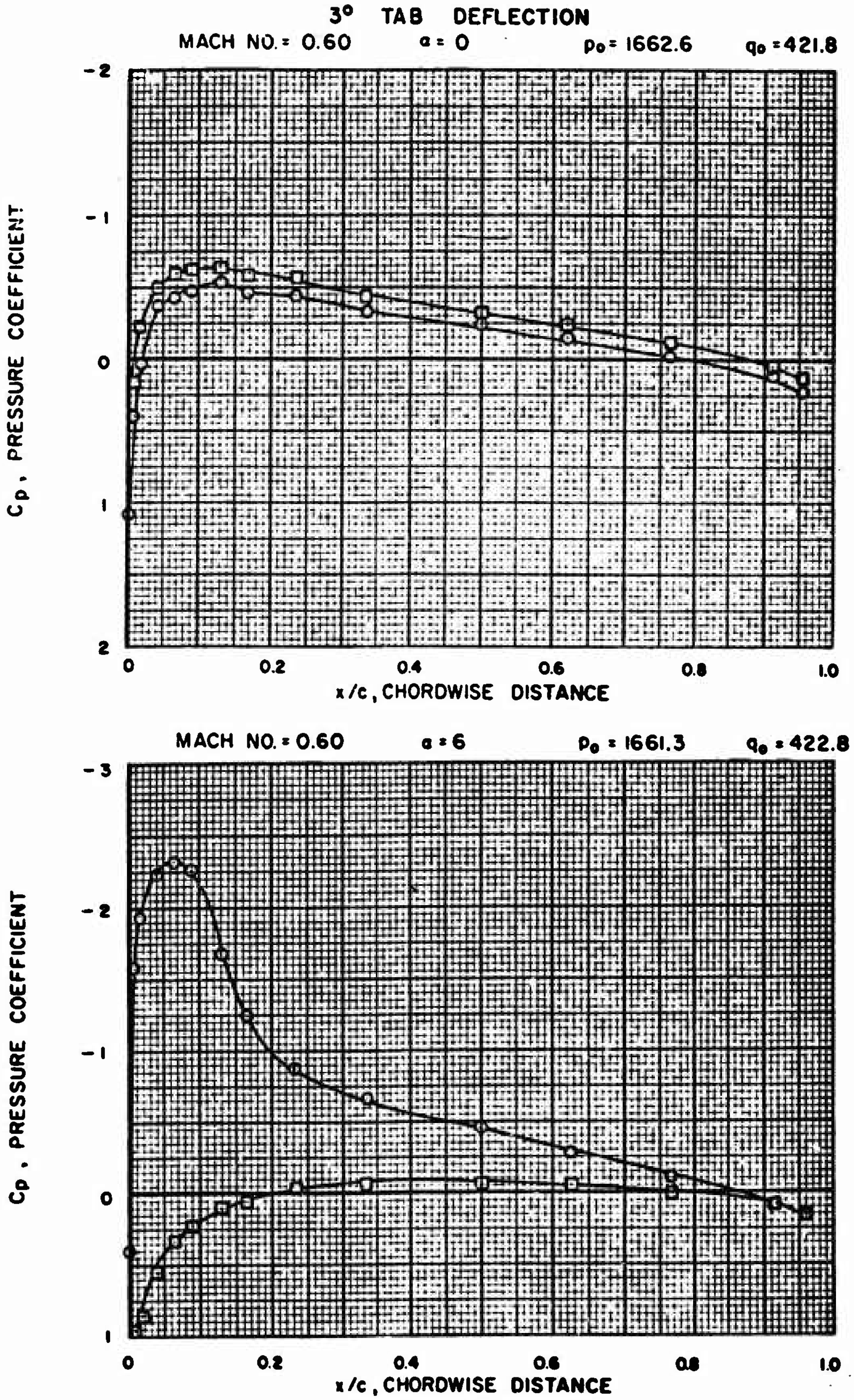
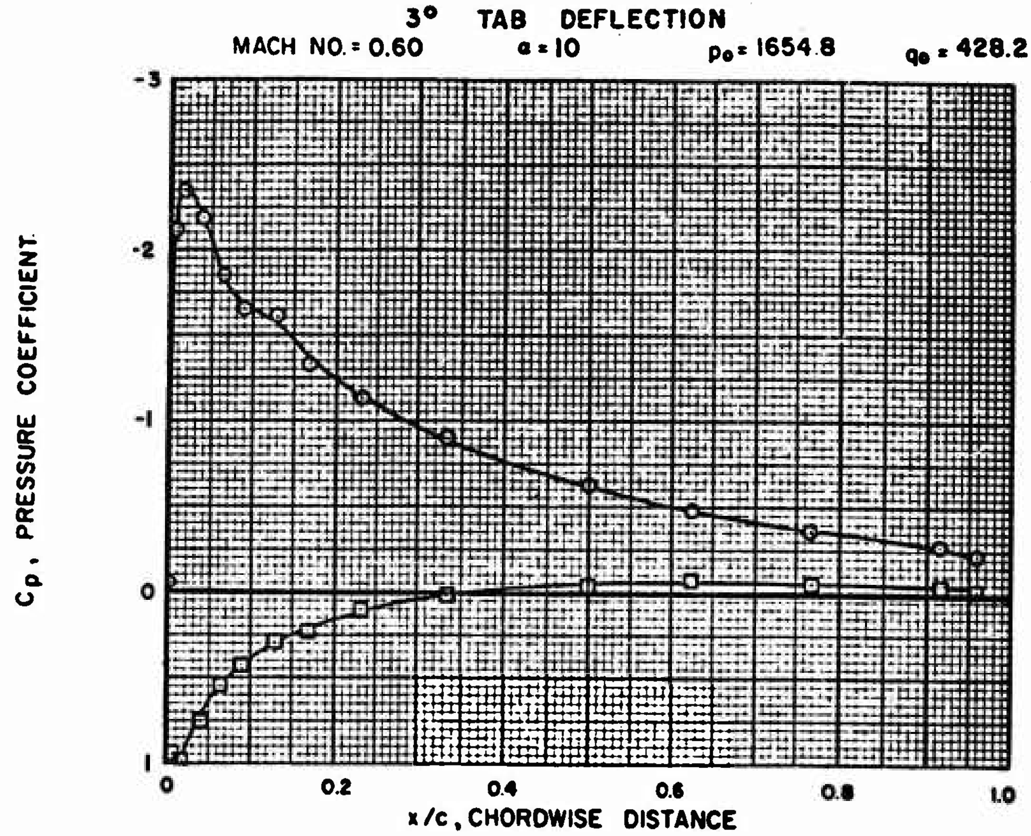


FIGURE 27 CHORDWISE PRESSURE COEFFICIENTS

3° TAB DEFLECTION



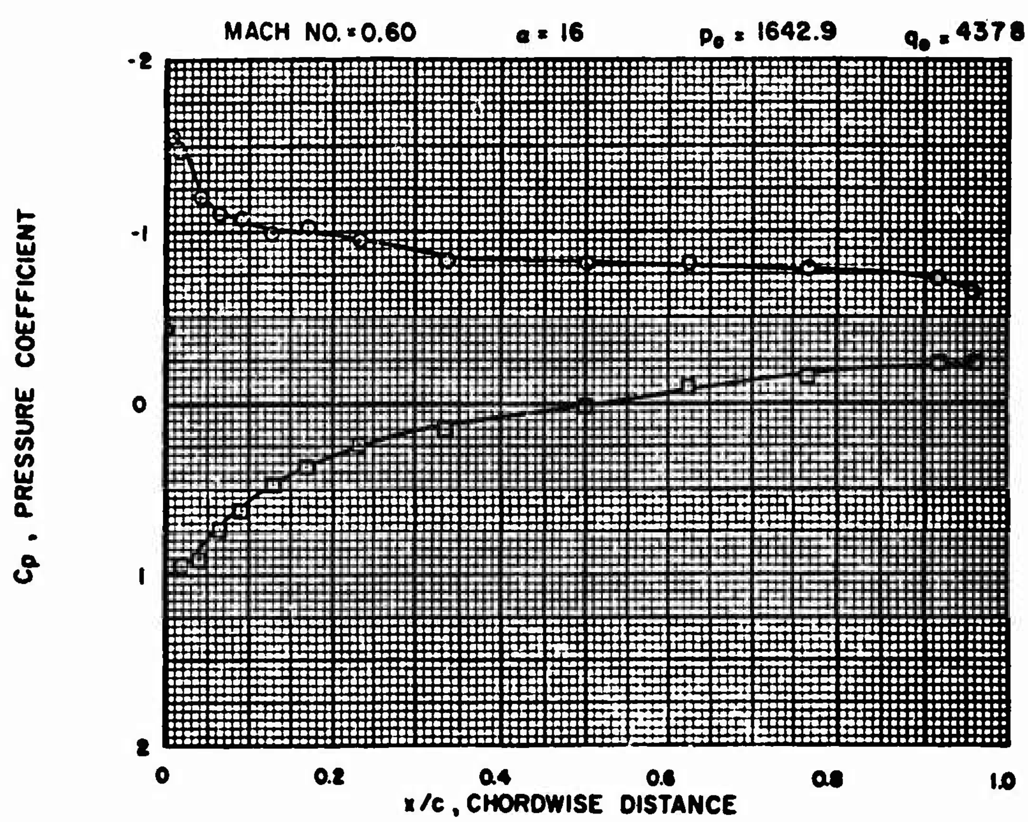
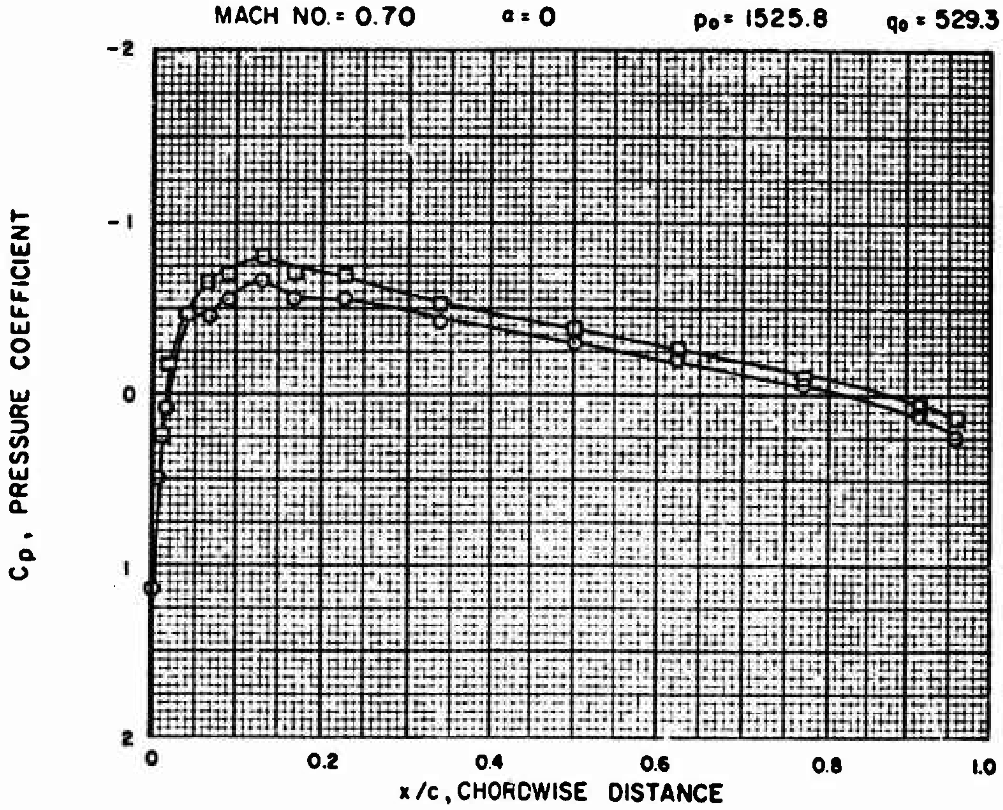


FIGURE 28 CHORDWISE PRESSURE COEFFICIENTS

3° TAB DEFLECTION



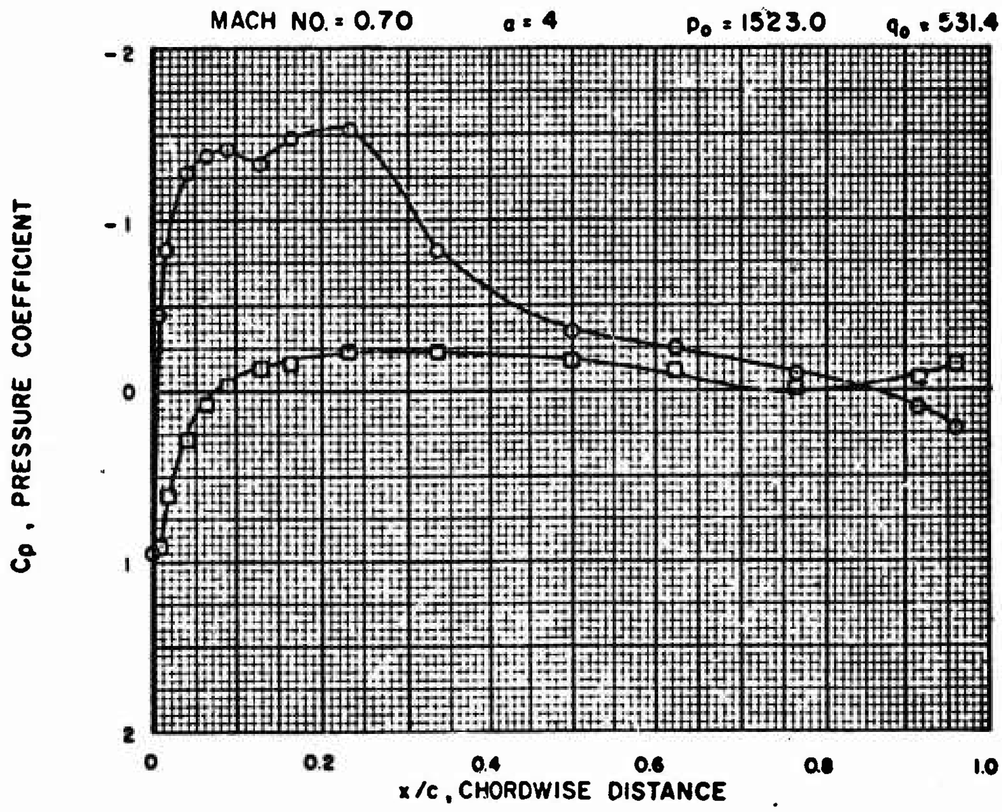
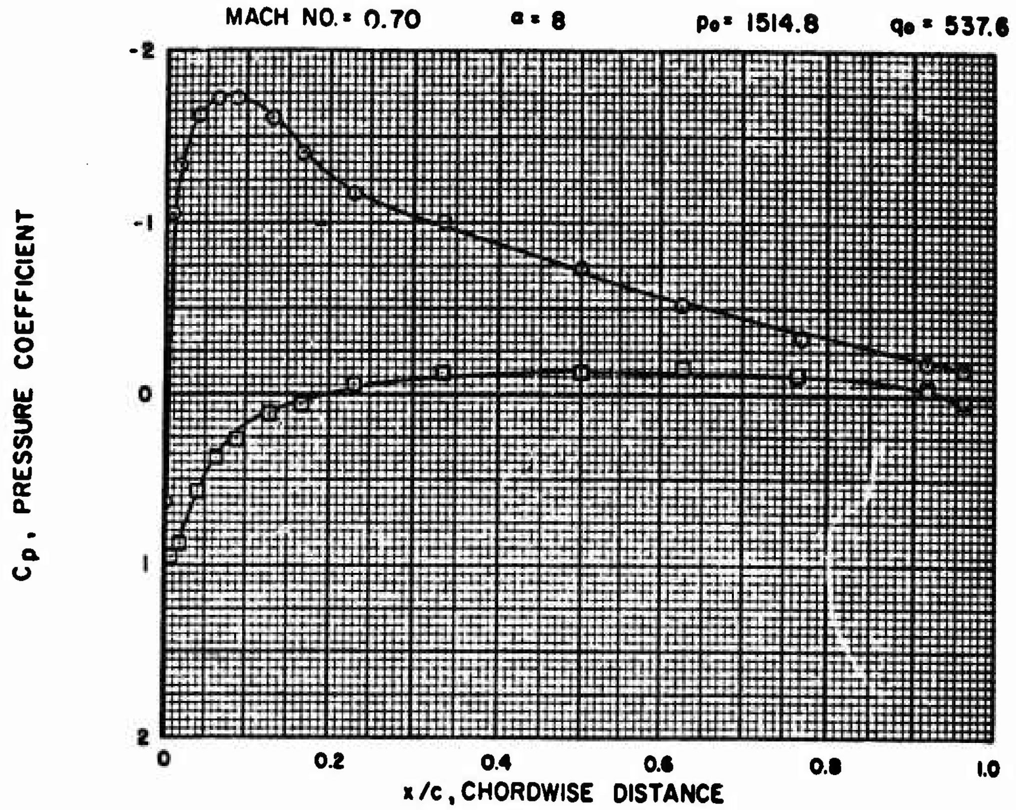


FIGURE 29 CHORDWISE PRESSURE COEFFICIENTS

3° TAB DEFLECTION



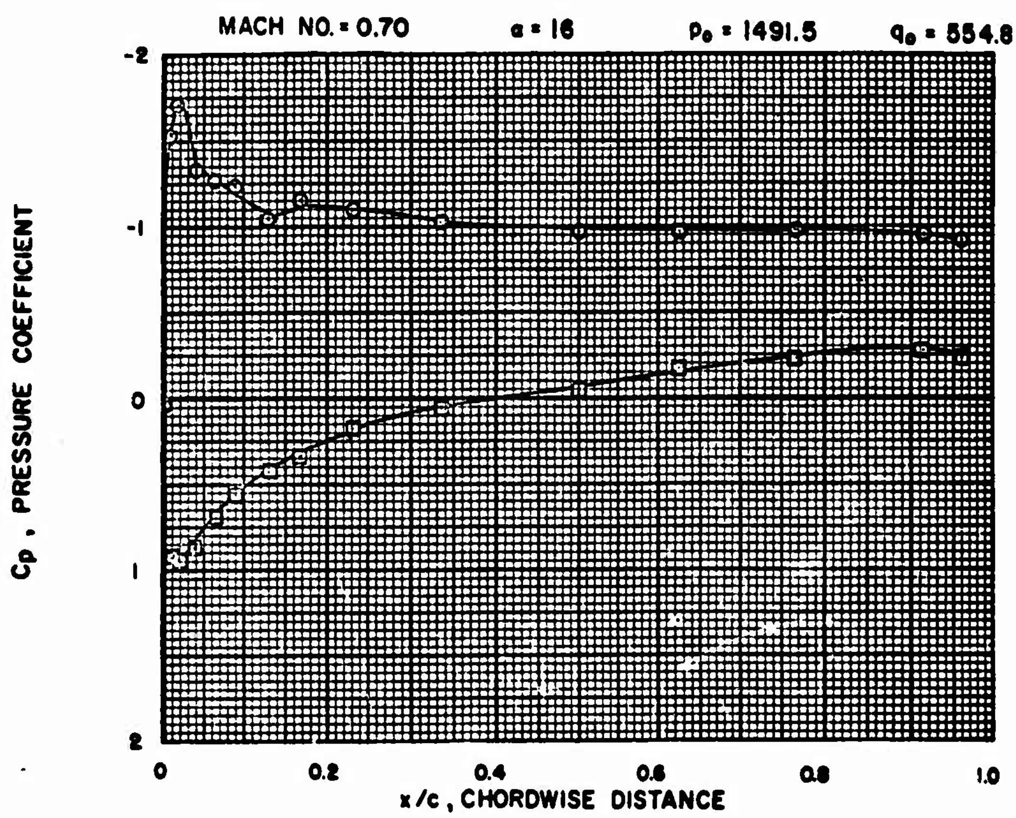


FIGURE 30 CHORDWISE PRESSURE COEFFICIENTS

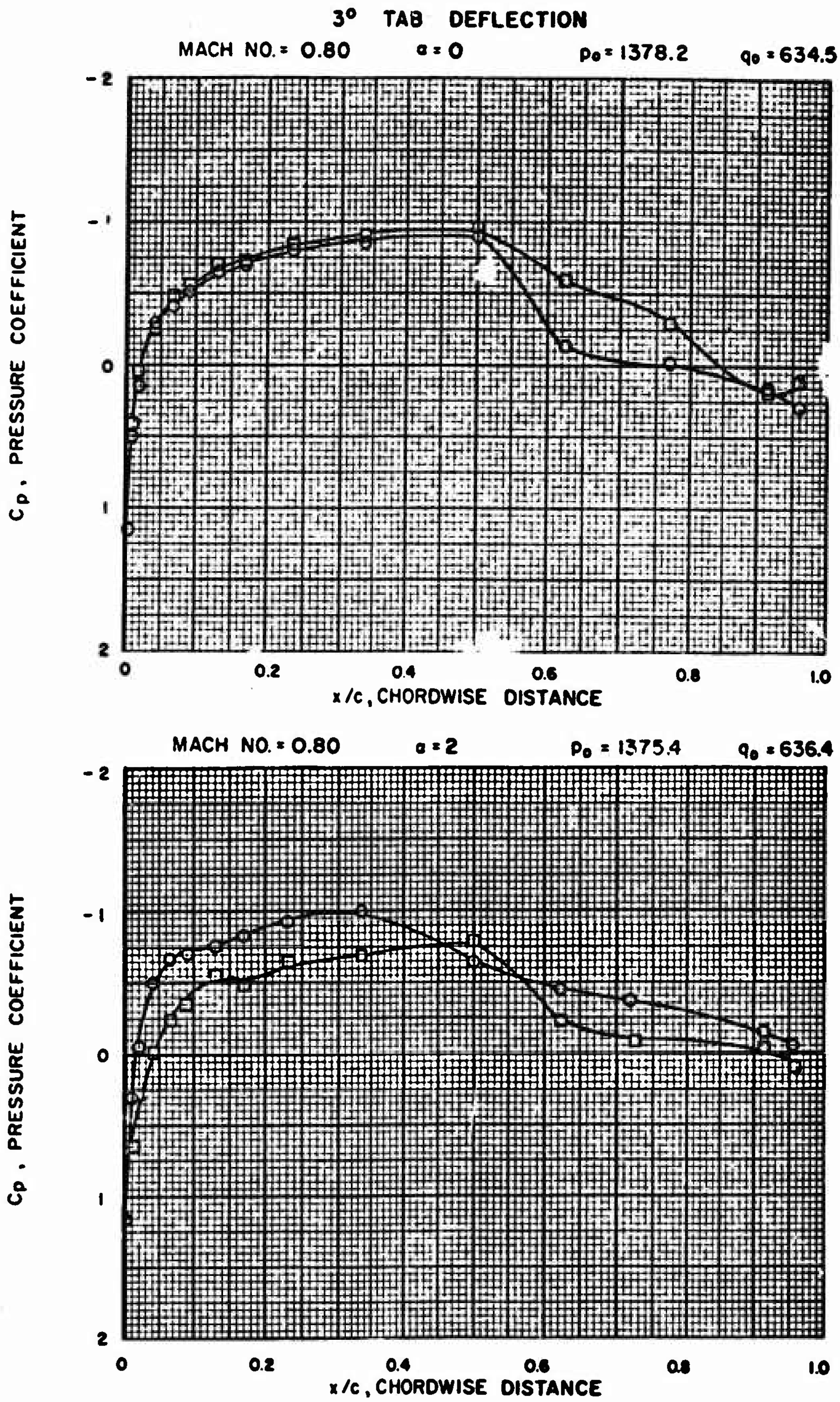


FIGURE 31 CHORDWISE PRESSURE COEFFICIENTS

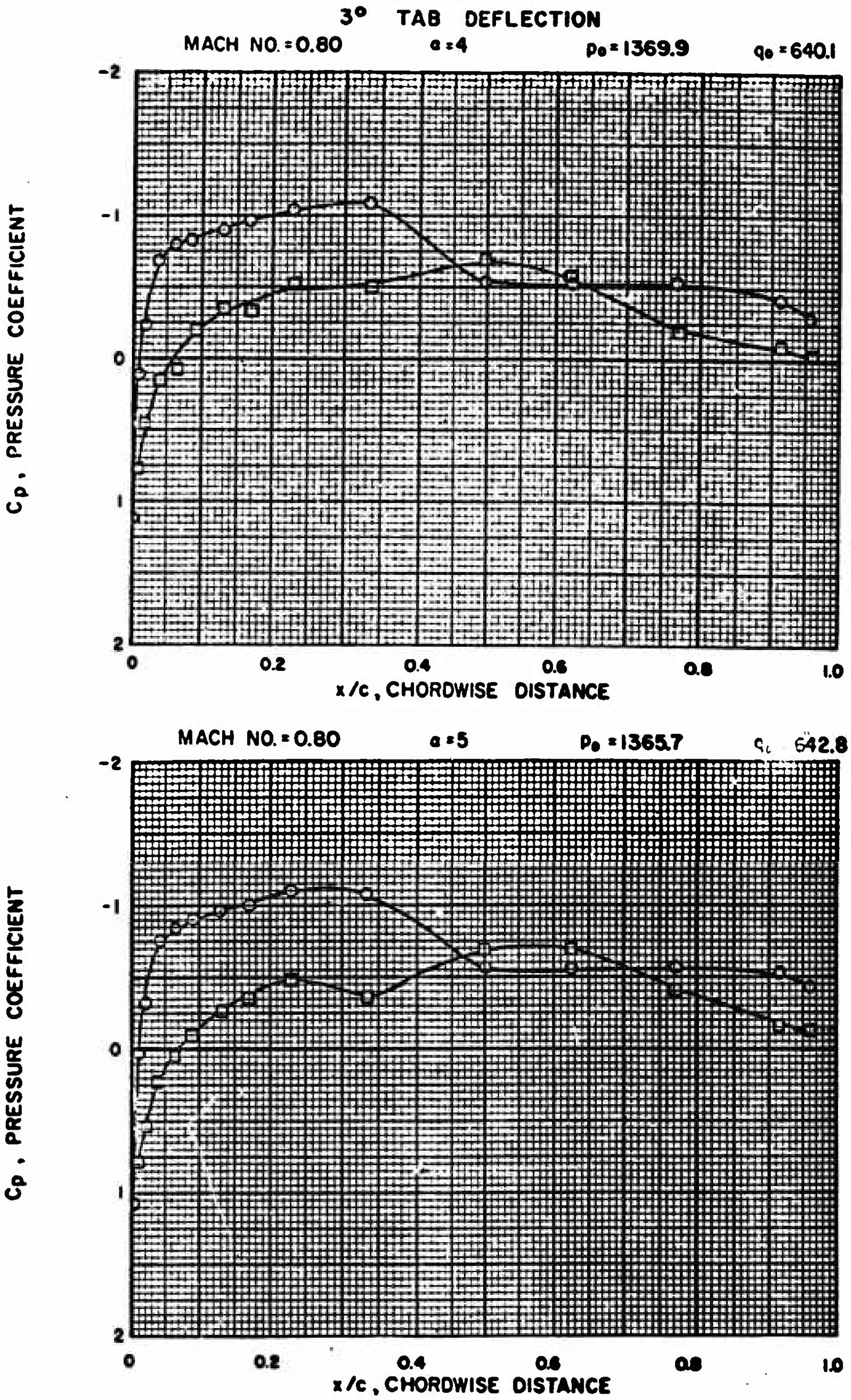


FIGURE 32 CHORDWISE PRESSURE COEFFICIENTS

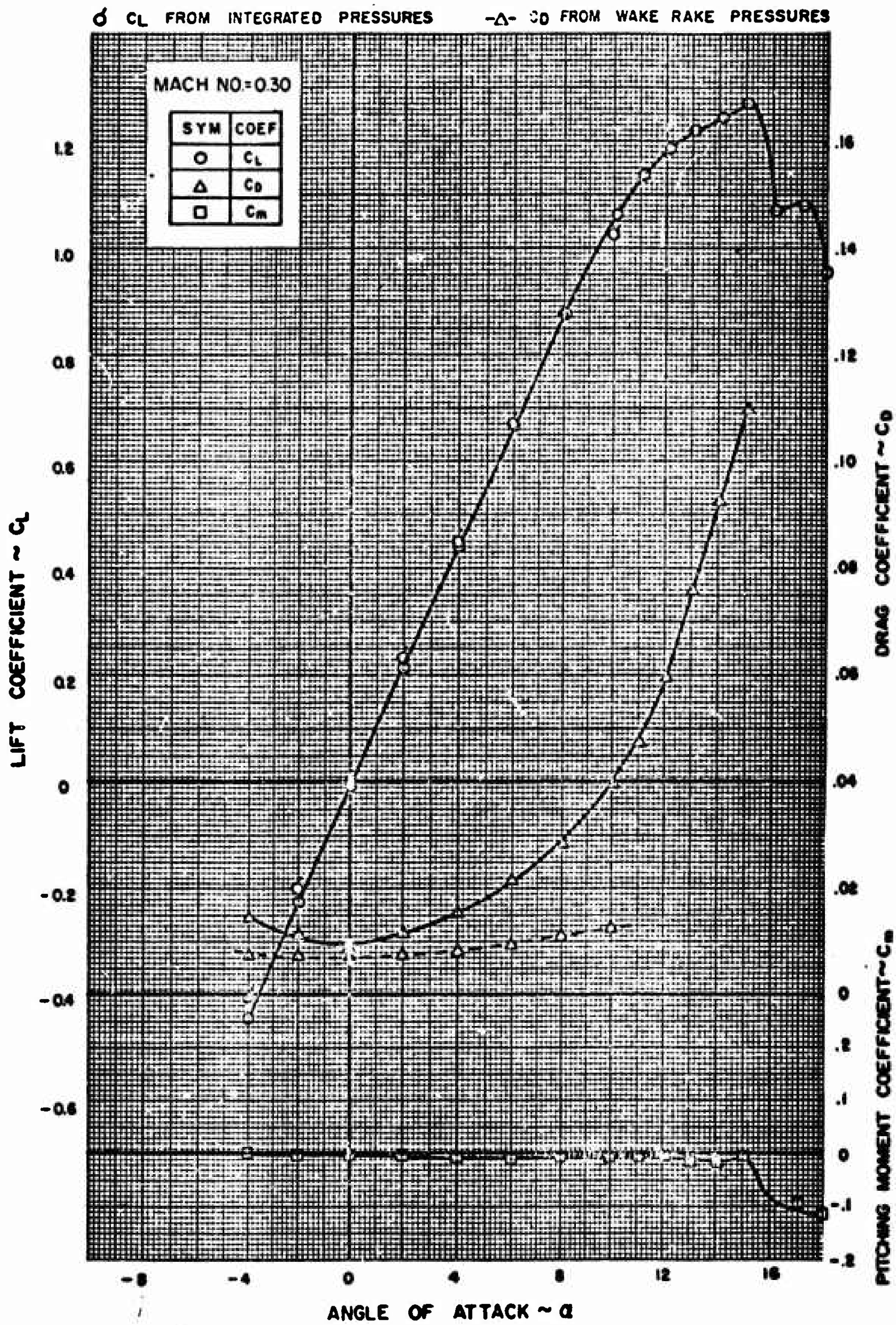


FIGURE 33. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

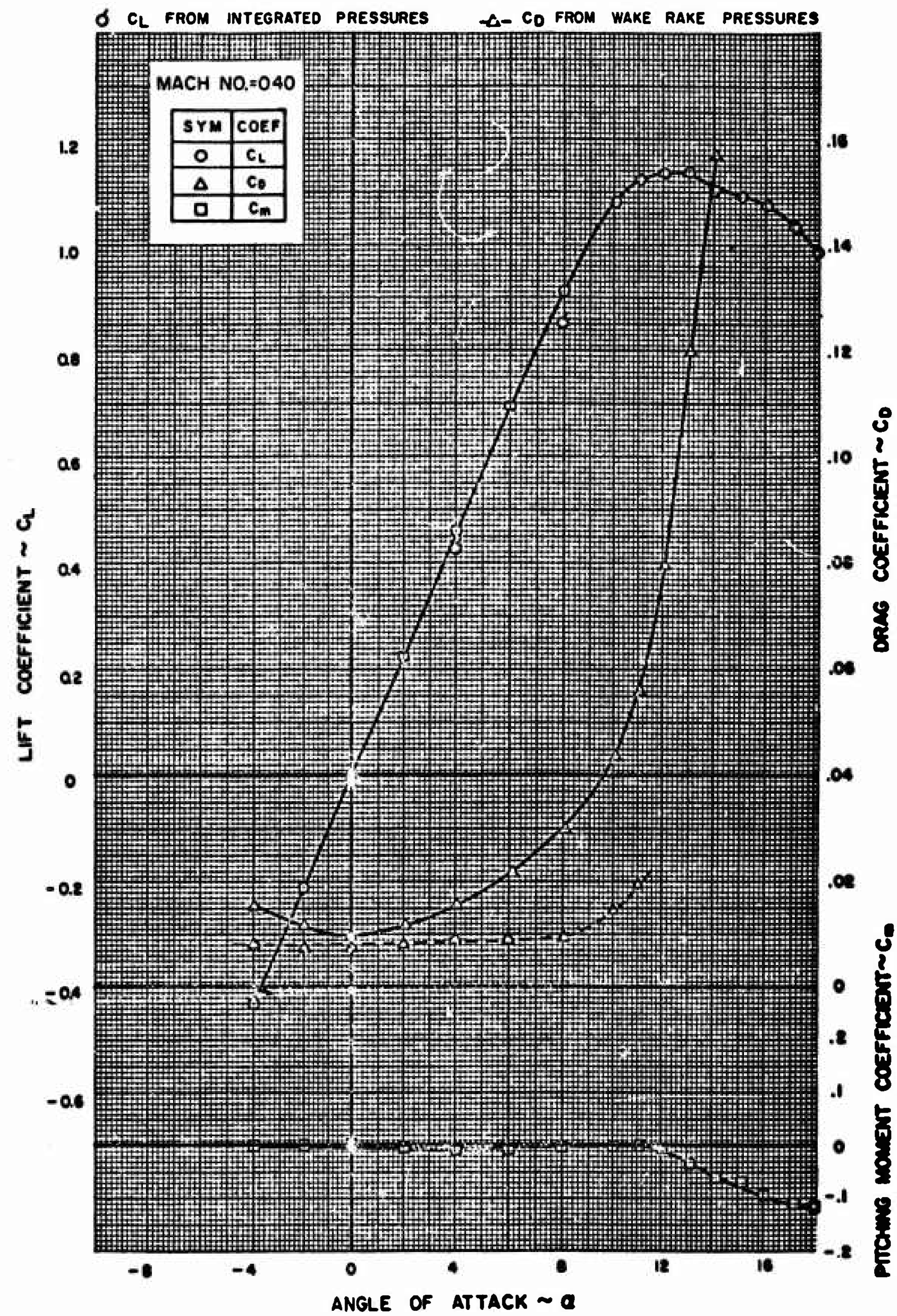


FIGURE 34. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

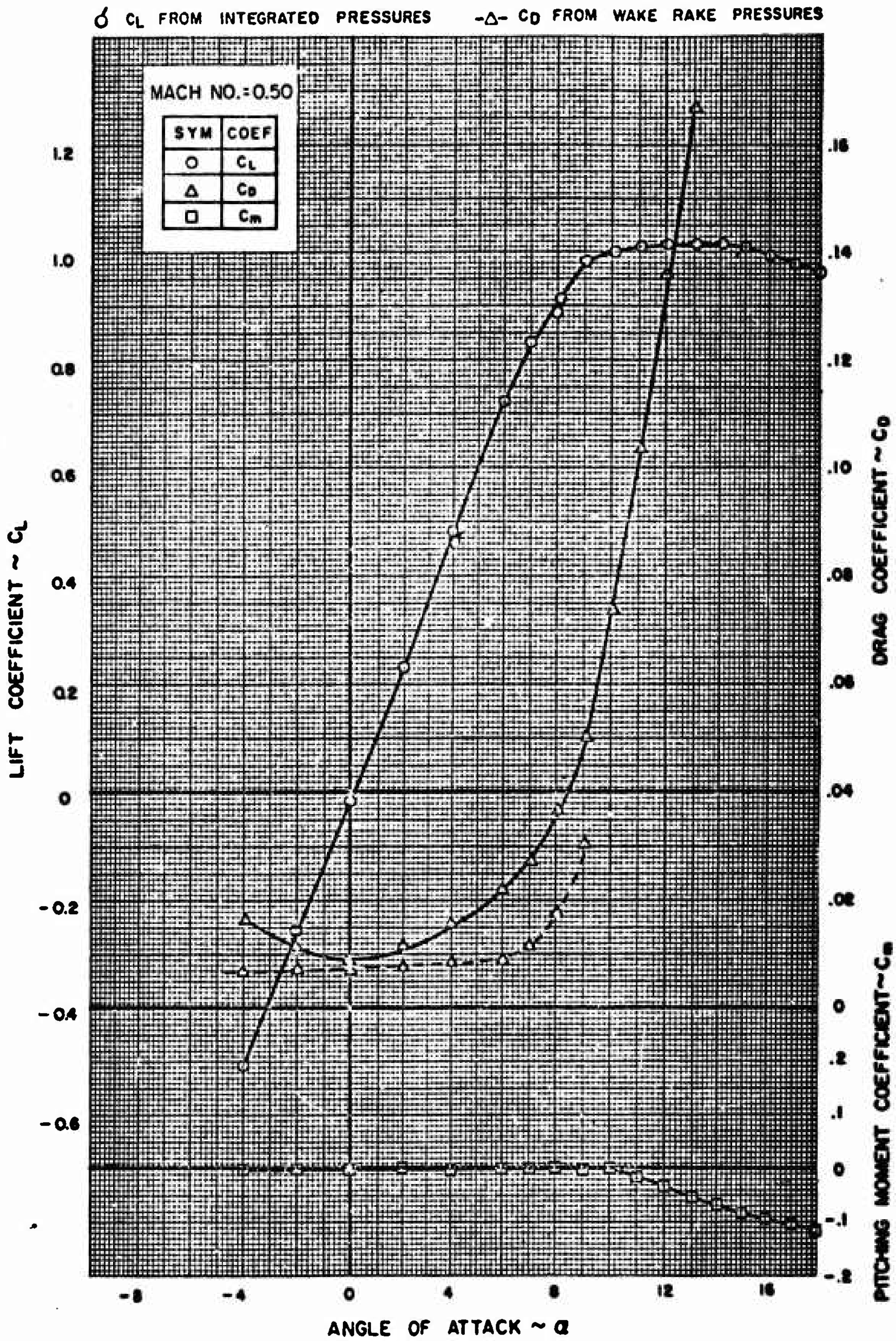


FIGURE 35. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

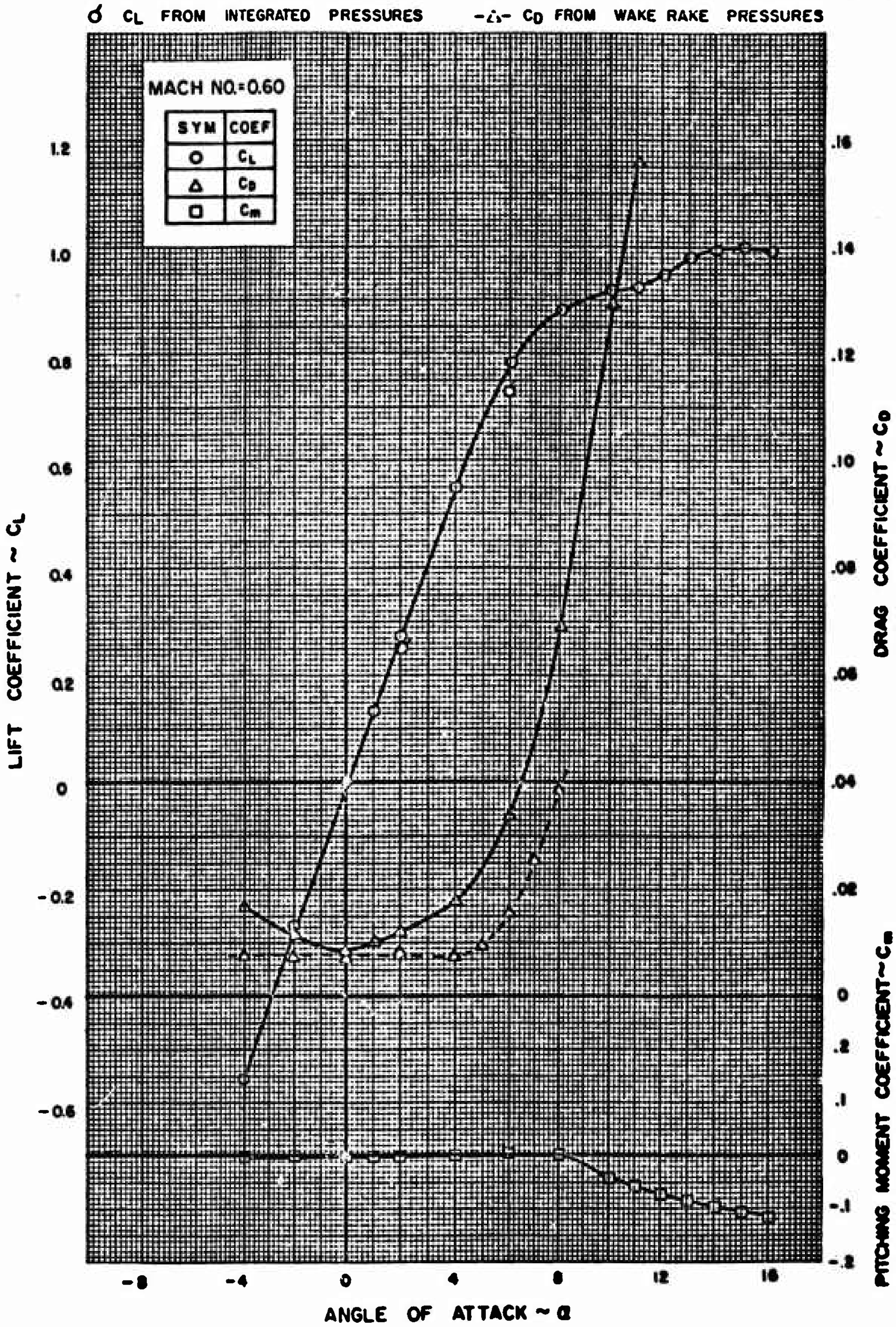


FIGURE 36. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

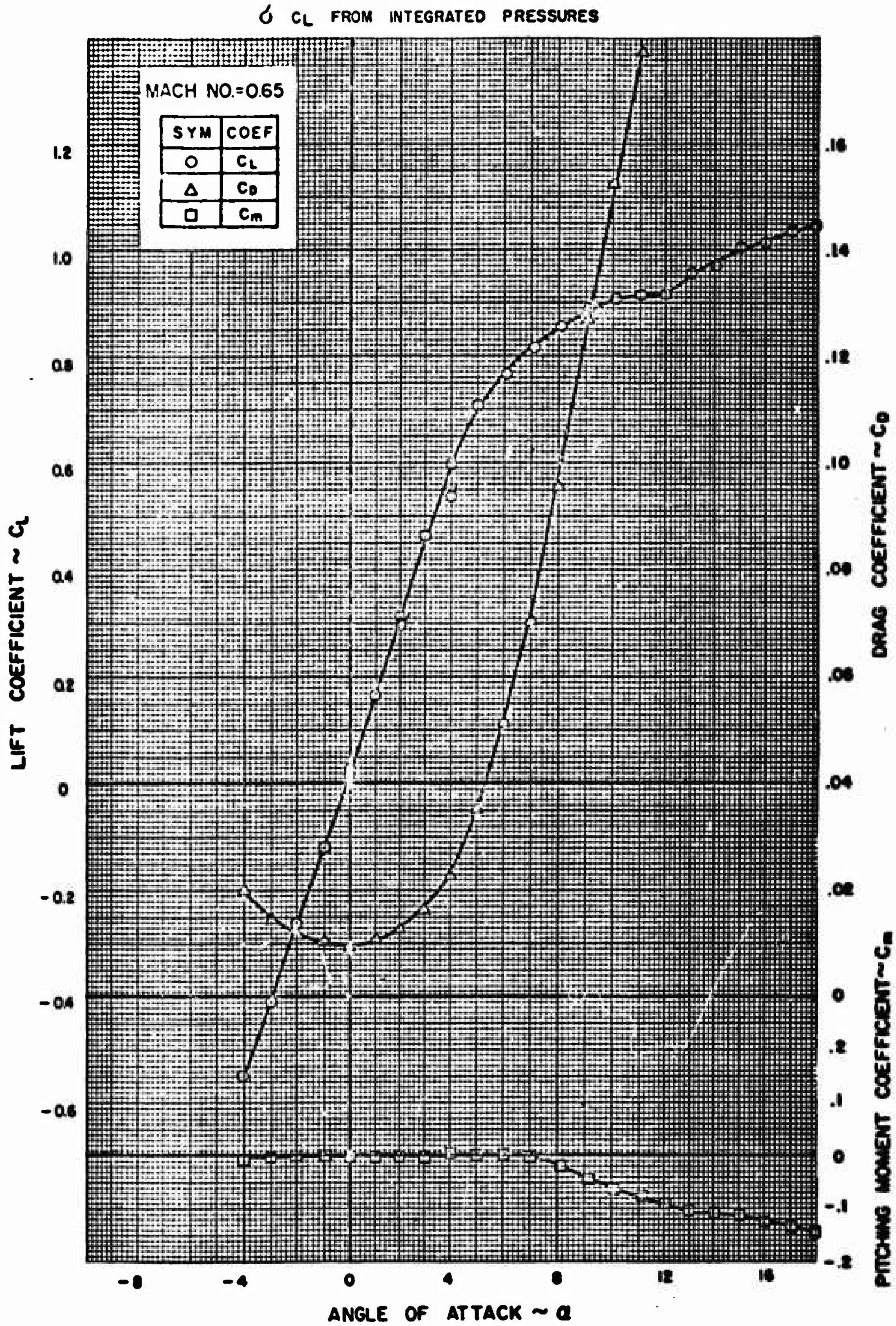


FIGURE 37. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

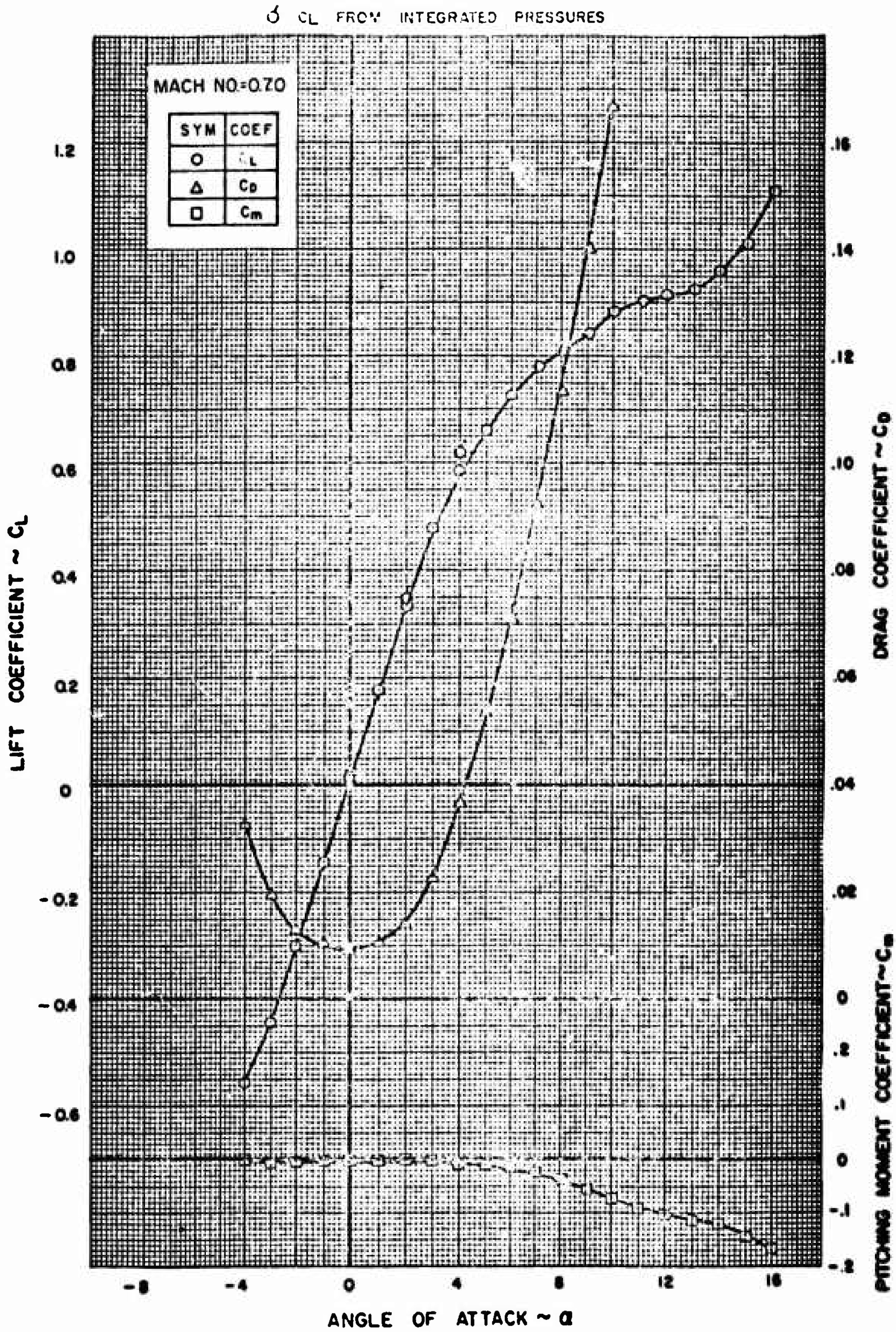


FIGURE 38. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

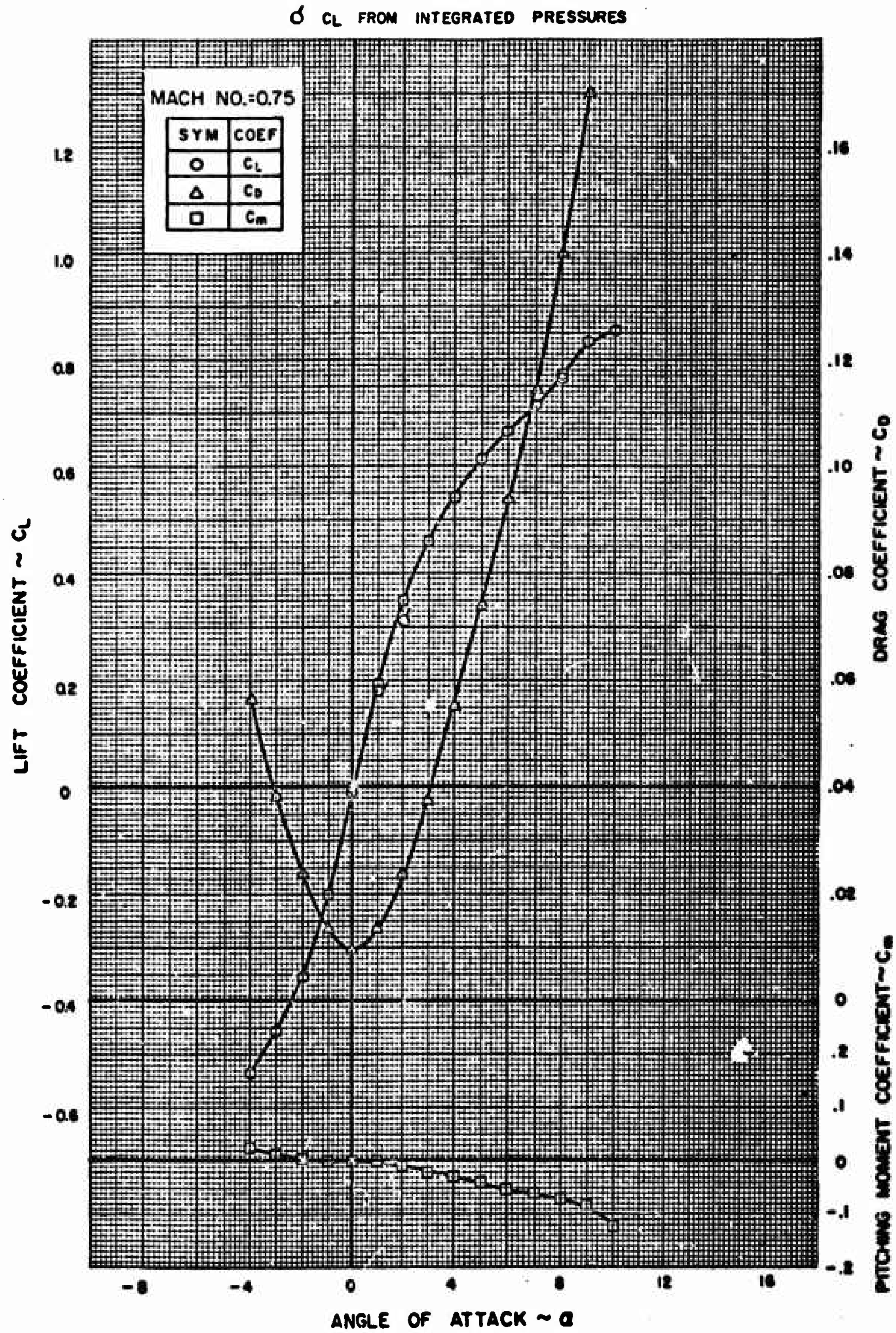


FIGURE 39. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

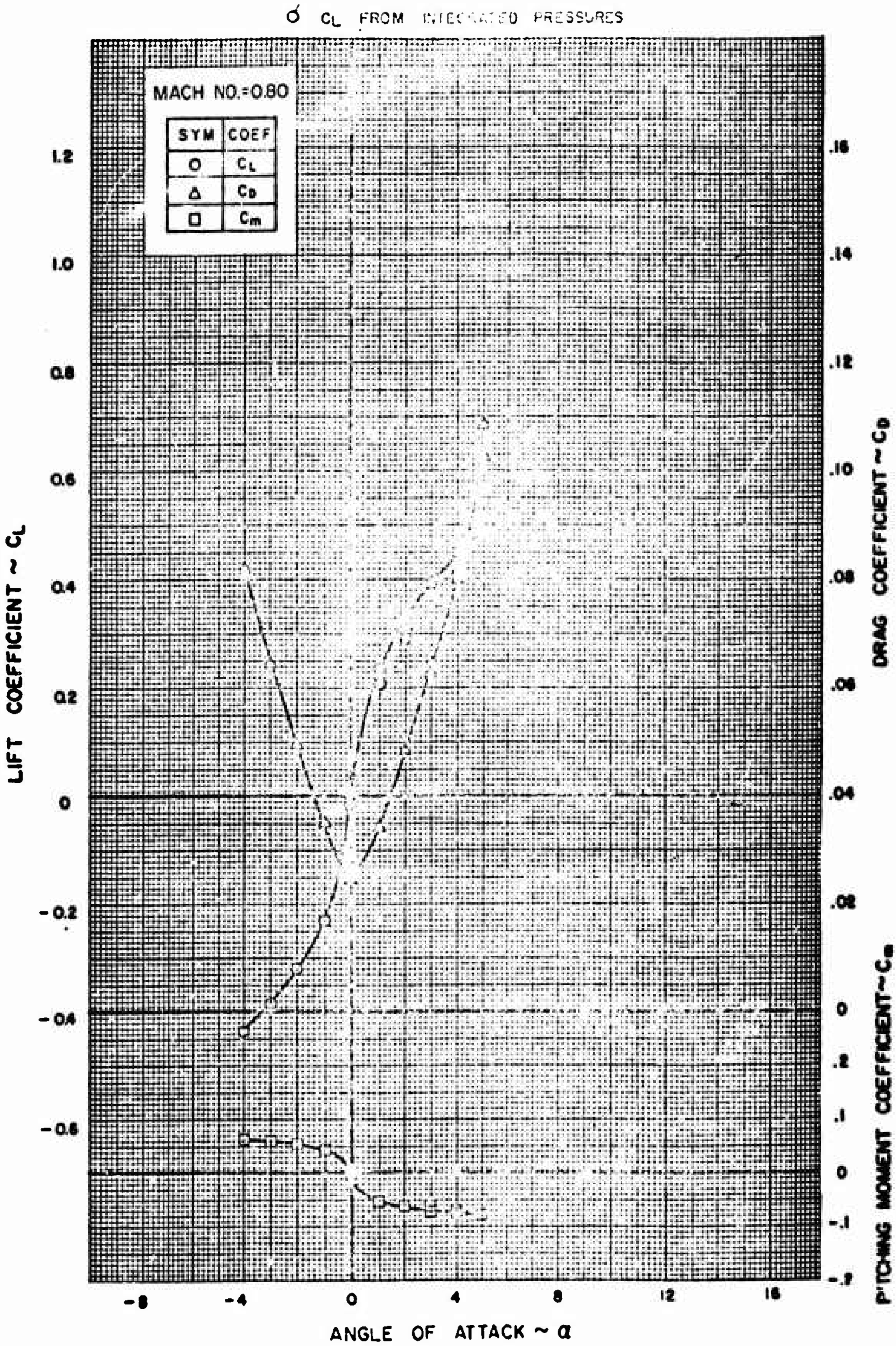


FIGURE 4a VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

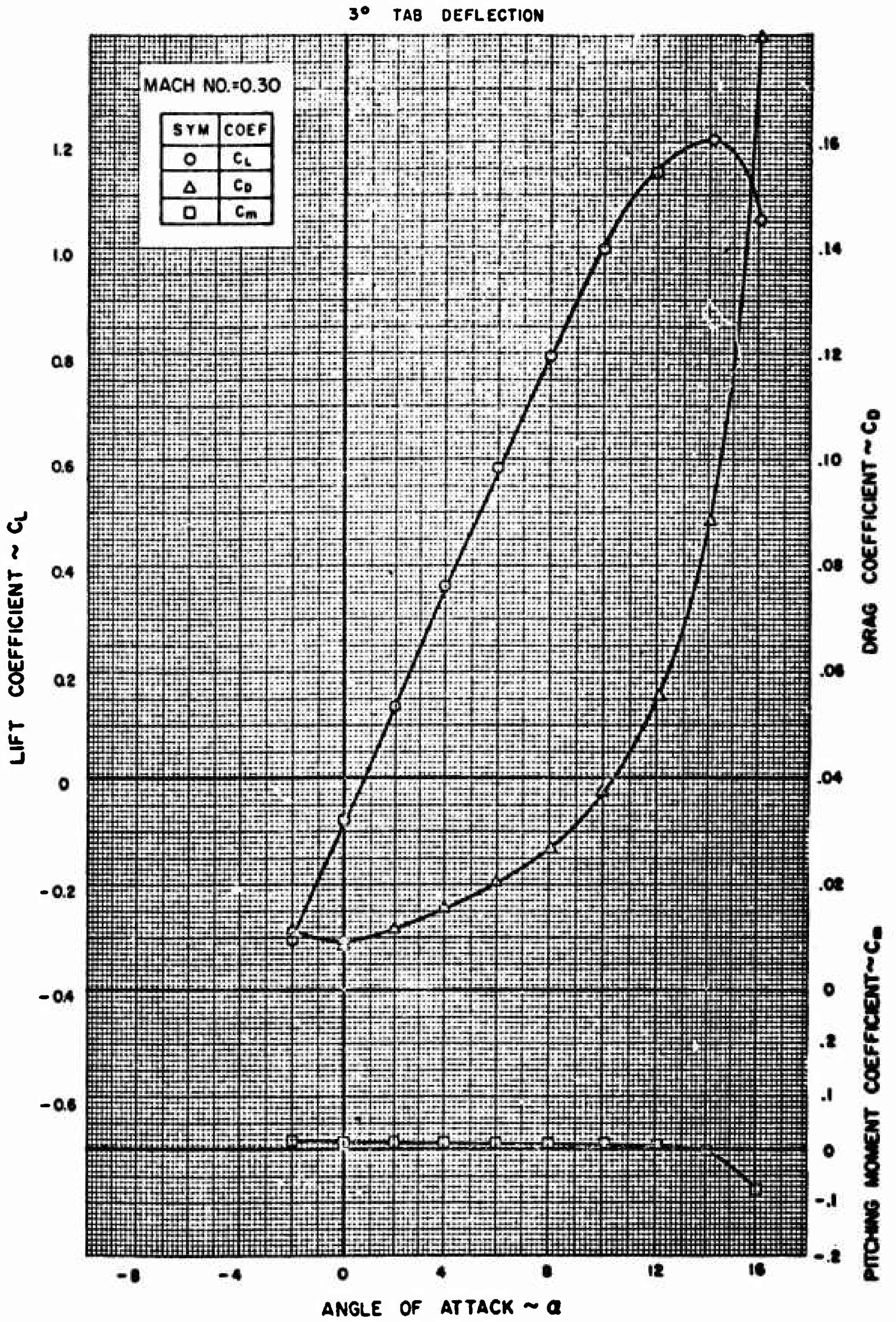


FIGURE 41. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

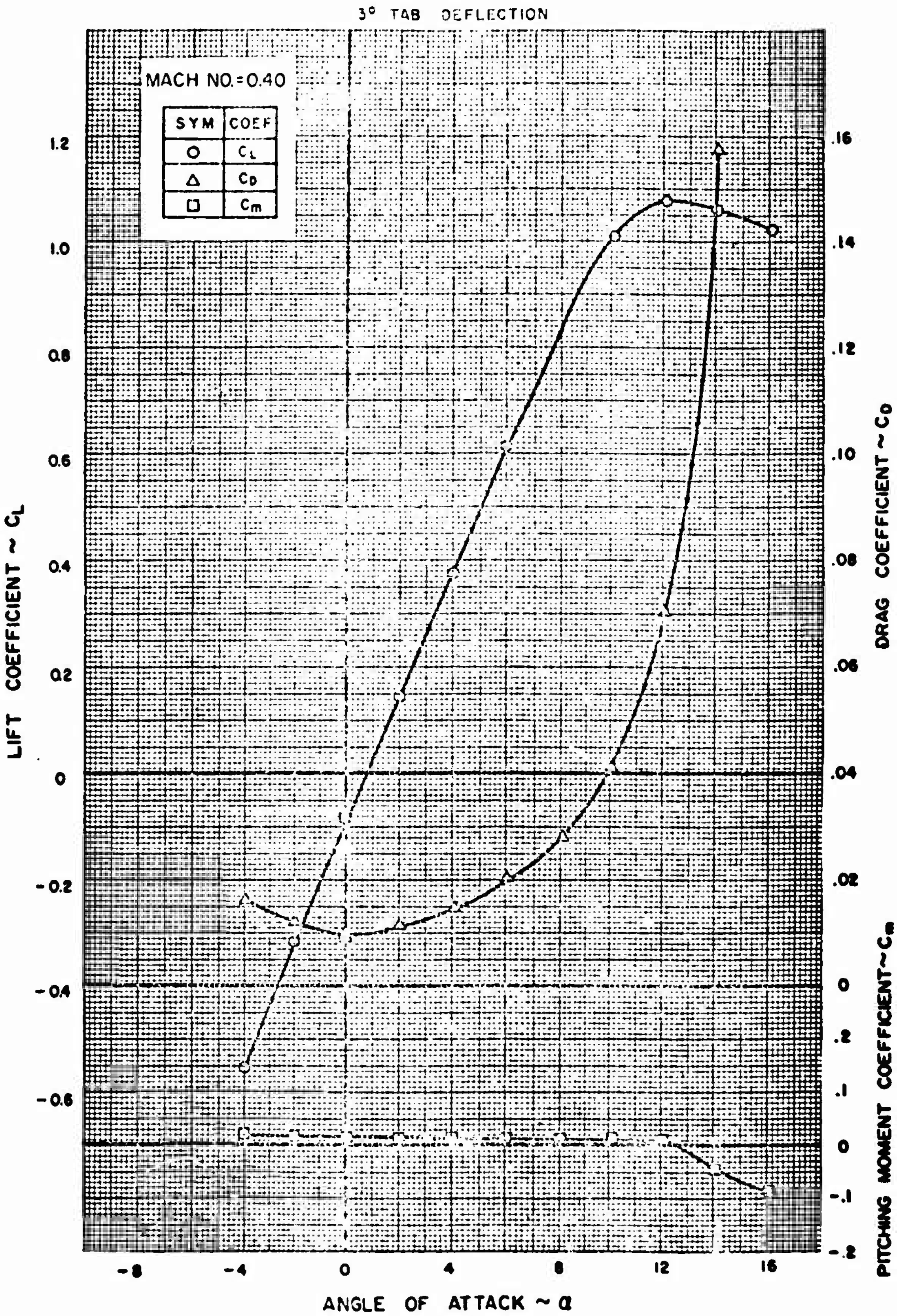


FIGURE 42. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

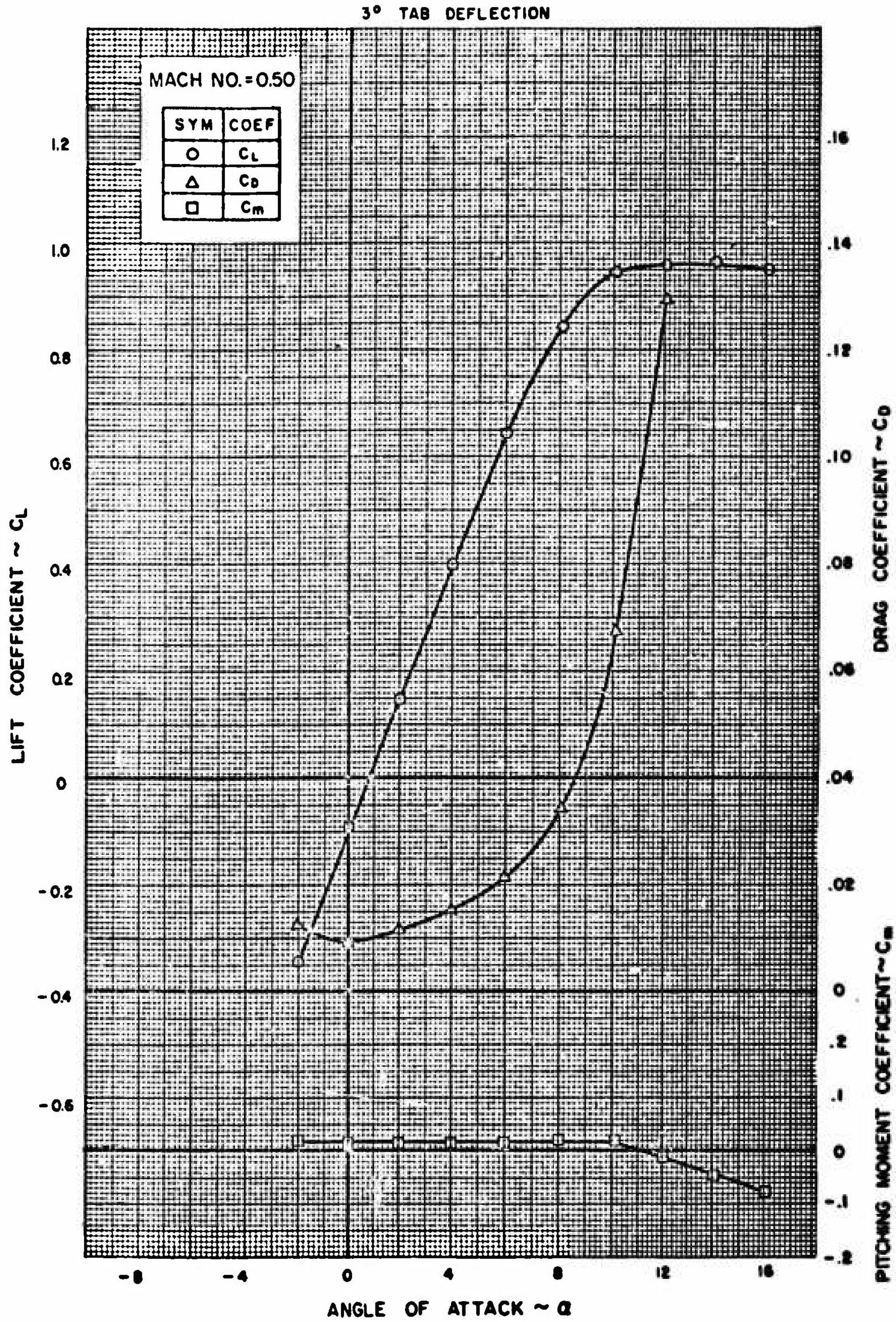


FIGURE 43. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

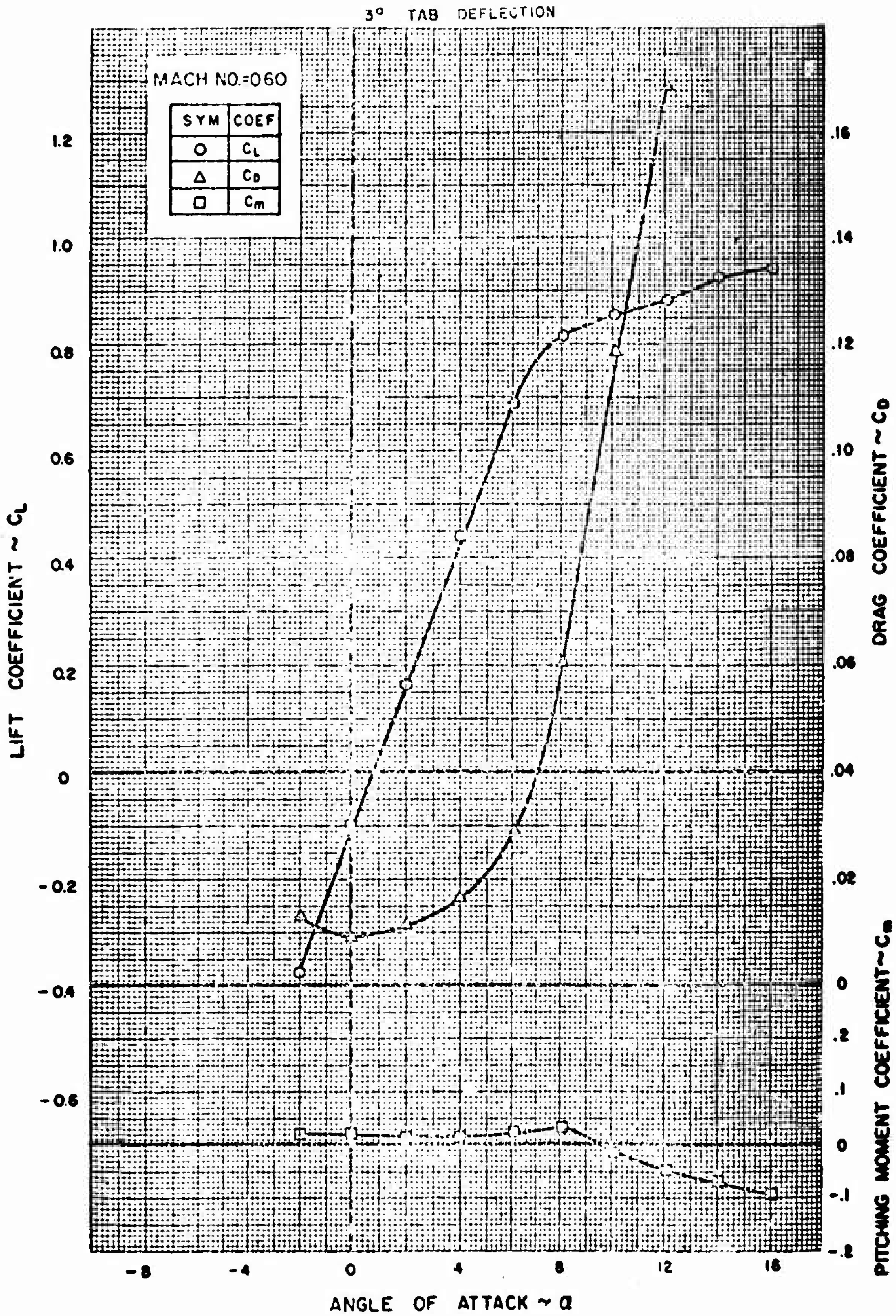


FIGURE 44. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

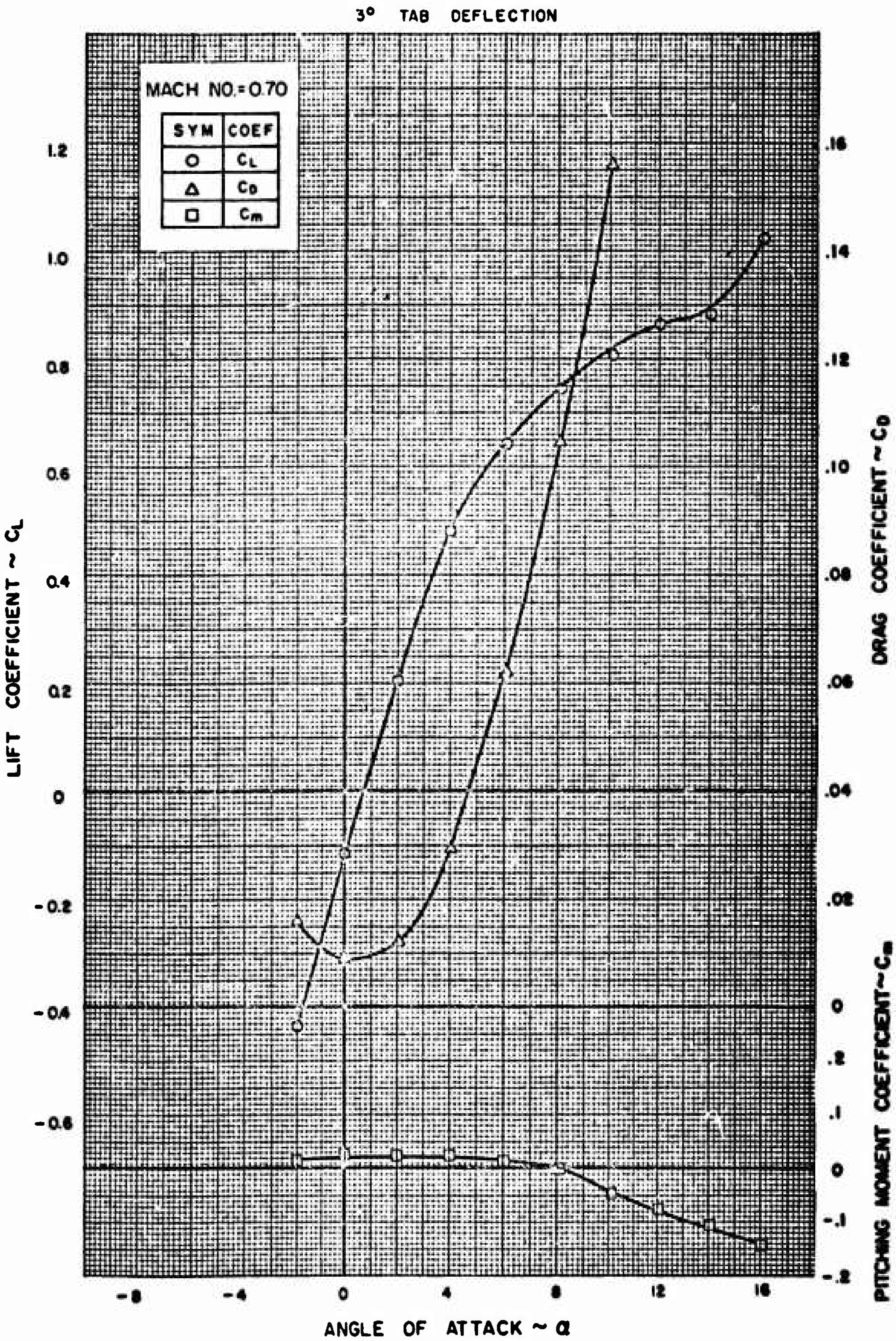


FIGURE 45. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

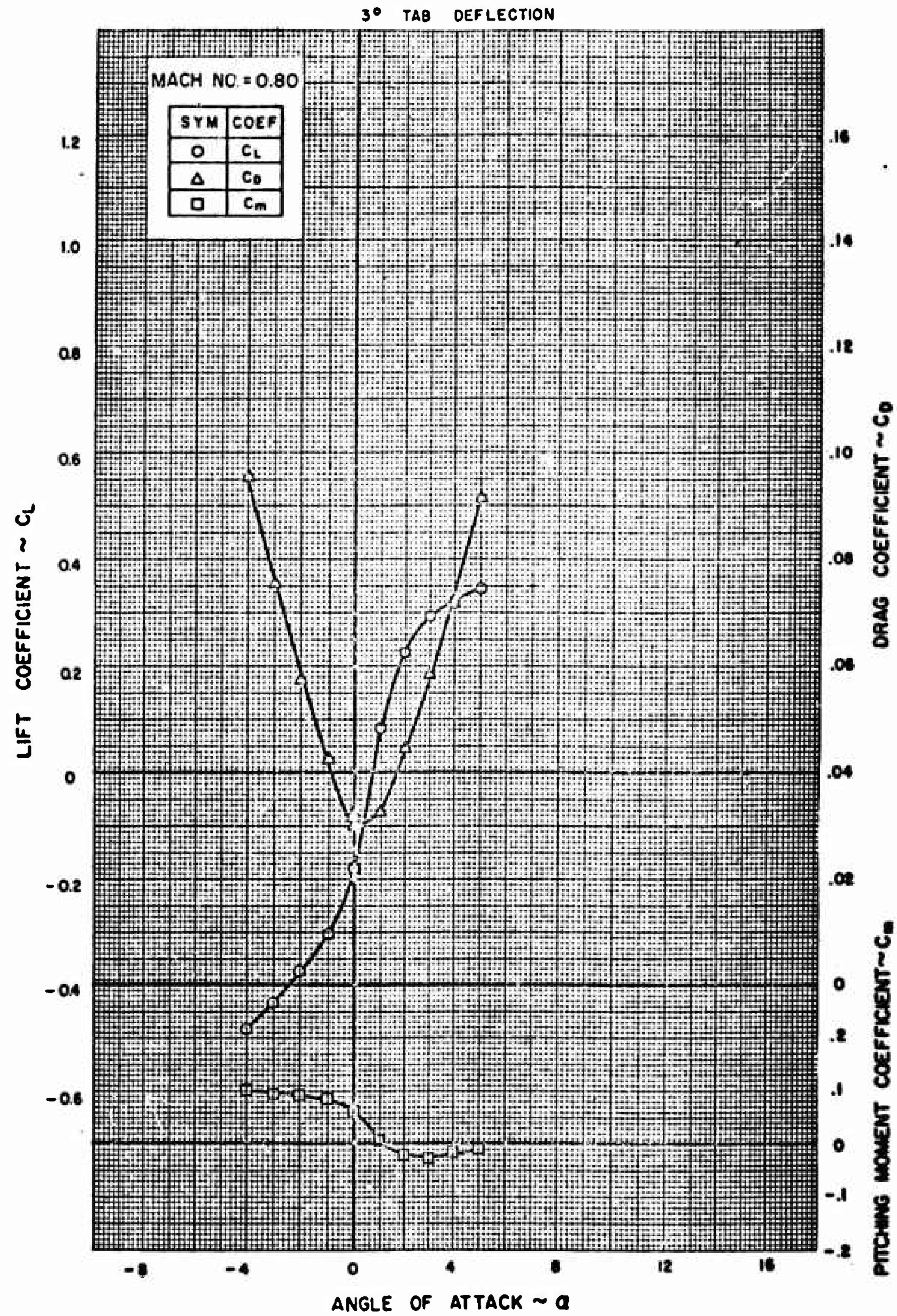


FIGURE 46. VARIATION OF FORCE COEFFICIENTS WITH ANGLE OF ATTACK

APPENDIX I

FORCE AND MOMENT COEFFICIENTS SUPPLEMENTARY DATA

M	RUN	α	C_L	C_D	C_m
.3	2	16	1.073	.2255	-.102
.3	2	18	.955	.2834	-.113
.3	2	19	.992	.3193	-.117
.3	2	19	.992	.3193	-.117
.3	2	20	.965	.3456	-.120
.3	2	21	.930	.3656	-.118
.3	2	22	.890	.3818	-.116
.3	2	24	.853	.4253	-.131
.3	2	26	.923	.4936	-.170
.3	2	28	1.023	.5846	-.216
.4	3	15	1.095	.2109	-.071
.4	3	16	1.079	.2438	-.097
.4	3	17	1.033	.2757	-.111
.4	3	18	.986	.2978	-.118
.4	3	19	.939	.3095	-.112
.4	3	20	.888	.3292	-.113
.4	3	22	.844	.8617	-.113
.4	3	24	.861	.4189	-.133
.4	3	26	1.003	.5332	-.173
.4	3	28	1.055	.5929	-.190
.5	4	13	1.014	.1674	-.057
.5	4	14	1.017	.2014	-.069
.5	4	15	1.012	.2316	-.084
.5	4	16	.996	.2594	-.095
.5	4	17	.982	.2875	-.106
.5	4	18	.968	.3136	-.118
.5	4	20	.909	.3481	-.119
.5	4	22	.877	.3857	-.129
.5	4	24	.994	.4667	-.171

M	RUN	α	C_L	C_D	C_m
.6	20	12	.950	.1860	-.072
.6	20	13	.982	.2352	-.085
.6	20	14	.998	.2398	-.095
.6	20	15	1.006	.2644	-.103
.6	20	16	.997	.2915	-.115
.65	8	12	.916	.2030	-.091
.65	8	13	.955	.2308	-.103
.65	8	14	.971	.2545	-.107
.65	8	15	1.005	.2824	-.116
.65	8	16	1.011	.3080	-.133
.65	8	17	1.035	.3247	-.138
.65	8	18	1.048	.3359	-.145
.65	8	19	1.052	.3492	-.156
.65	8	20	1.051	.3588	-.163
.7	9	11	.907	.1934	-.090
.7	9	12	.918	.2180	-.103
.7	9	13	.927	.2434	-.116
.7	9	14	.965	.2633	-.122
.7	9	15	1.019	.2845	-.148
.7	9	16	1.111	.3047	-.167
		-3 Degree Tab Deflection			
.4	29	16	1.025	.2386	-.086
.5	25	14	.968	.1945	-.048
.5	25	16	.953	.2575	-.078
.6	26	14	.928	.2218	-.068
.6	26	16	.942	.2802	-.092
.7	27	12	.864	.2087	-.075
.7	27	14	.883	.2583	-.103
.7	27	16	1.024	.3039	-.145

APPENDIX II

TABULATED PRESSURE COEFFICIENTS

Pressure measurements-trailing edge tab not deflected.

Run No.	Nominal Mach No.	Angle of Attack Range, Degrees	Page No.	Related Fig. Nos.
2	0.30	-4 to 26	58	5, 6
3	0.40	-4 to 28	61	7, 8
4	0.50	-4 to 24	64	9, 10
20	0.60	-4 to 16	68	11, 12
8	0.65	-4 to 20	70	13, 14
9	0.70	-4 to 16	74	15, 16
18	0.75	-4 to 10	77	17, 18
19	0.80	-4 to 5	80	19, 20

Pressure measurements-trailing edge tab deflected.

Run No.	Nominal Mach No.	Angle of Attack Range, Degrees	Page No.	Related Fig. Nos.
30	0.30	-2 to 16	83	21, 22
29	0.40	-4 to 16	84	23, 24
25	0.50	-2 to 16	86	25, 26
26	0.60	-2 to 16	88	27, 28
27	0.70	-2 to 16	90	29, 30
28	0.80	-4 to 5	91	31, 32

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

			RUN 2 1	RUN 2 2	RUN 2 3	RUN 2 4	RUN 2 5	RUN 2 6	RUN 2 7
			MU 0.30	MU 0.30	MU 0.30	MU 0.30	MU 0.30	MU 0.30	MU 0.30
			AU 0.	AU -2.0	AU -4.0	AU 0.	AU 2.0	AU 4.0	AU 6.0
			M 0.301	M 0.301	M 0.301	M 0.301	M 0.301	M 0.301	M 0.301
			A 0.	A -2.01	A -4.03	A 0.	A 2.01	A 4.03	A 6.04
			QO 126.1	QO 126.1	QO 126.1	QO 126.1	QO 126.1	QO 126.1	QO 126.1
			PO 1988.0	PO 1988.0	PO 1988.0	PO 1988.0	PO 1988.0	PO 1988.0	PO 1988.0
TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		1.004	0.937	0.395	0.994	0.972	0.530	-0.320
2	.008	U	0.261	0.676	0.920	0.272	-0.358	-1.210	-2.319
3	.017	U	-0.050	0.371	0.690	-0.047	-0.644	-1.348	-2.230
4	.040	U	-0.380	-0.008	0.322	-0.323	-0.789	-1.315	-1.918
5	.065	U	-0.436	-0.149	0.116	-0.390	-0.743	-1.114	-1.518
6	.090	U	-0.454	-0.203	0.045	-0.408	-0.708	-1.032	-1.387
7	.130	U	-0.436	-0.309	-0.076	-0.433	-0.630	-0.823	-1.139
8	.168	U	-0.408	-0.267	-0.079	-0.390	-0.570	-0.759	-0.973
9	.233	U	-0.426	-0.306	-0.108	-0.380	-0.555	-0.674	-0.835
10	.335	U	-0.305	-0.231	-0.080	-0.295	-0.410	-0.504	-0.605
11	.500	U	-0.231	-0.185	-0.119	-0.220	-0.290	-0.338	-0.413
12	.625	U	-0.185	-0.139	-0.087	-0.142	-0.180	-0.214	-0.262
13	.769	U	-0.043	-0.015	0.016	-0.057	-0.056	-0.104	-0.121
14	.915	U	0.045	0.059	0.066	0.045	0.089	0.054	0.059
15	.960	U	0.148	0.183	0.183	0.166	0.216	0.146	0.126
16	.008	L	0.123	-0.450	-1.348	0.092	0.623	0.863	0.998
17	.017	L	-0.178	-0.744	-1.521	-0.231	0.325	0.616	0.849
18	.040	L	-0.380	-0.768	-1.287	-0.436	0.028	0.307	0.548
19	.065	L	-0.479	-0.793	-1.149	-0.514	-0.118	0.123	0.332
20	.090	L	-0.486	-0.750	-1.043	-0.521	-0.132	0.052	0.247
21	.130	L	-0.464	-0.679	-0.933	-0.510	-0.174	-0.005	0.141
22	.168	L	-0.418	-0.619	-0.809	-0.450	-0.174	-0.022	0.077
23	.233	L	-0.443	-0.559	-0.738	-0.479	-0.210	-0.101	0.006
24	.335	L	-0.337	-0.424	-0.557	-0.330	-0.107	-0.026	0.012
25	.500	L	-0.238	-0.311	-0.380	-0.248	-0.065	-0.027	-0.002
26	.625	L	-0.185	-0.219	-0.260	-0.231	-0.069	-0.034	-0.041
27	.769	L	-0.043	-0.092	-0.108	-0.057	0.070	0.080	0.058
28	.915	L	0.056	0.050	0.047	0.038	0.169	0.151	0.105
29	.960	L	0.141	0.166	0.146	0.152	0.261	0.258	0.187

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

		RUN 2 8	RUN 2 9	RUN 2 10	RUN 2 11	RUN 2 12	RUN 2 13	RUN 2 14
	MU	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	AU	8.0	10.0	11.0	12.0	13.0	14.0	15.0
	M	0.301	0.301	0.301	0.301	0.302	0.302	0.302
	A	8.05	10.06	11.07	12.07	13.07	14.07	15.08
	QO	126.1	126.1	126.1	126.1	126.9	126.9	126.9
	PO	1988.0	1988.0	1988.0	1988.0	1987.2	1987.2	1987.2
TAP	X/C	CP	CP	CP	CP	CP	CP	CP
1	.000	-1.419	-2.752	-3.392	-3.966	-4.406	-4.434	-5.352
2	.008 U	-3.567	-4.907	-5.584	-6.160	-6.627	-6.660	-8.134
3	.017 U	-3.185	-4.342	-5.056	-5.656	-6.137	-6.174	-5.598
4	.040 U	-2.410	-2.999	-3.299	-3.551	-3.659	-3.715	-3.993
5	.065 U	-1.979	-2.327	-2.557	-2.743	-2.768	-2.836	-2.987
6	.090 U	-1.713	-1.974	-2.155	-2.306	-2.321	-2.382	-2.478
7	.130 U	-1.363	-1.490	-1.682	-1.805	-1.775	-1.862	-1.941
8	.168 U	-1.179	-1.313	-1.441	-1.526	-1.473	-1.574	-1.597
9	.233 U	-0.981	-1.027	-1.138	-1.244	-1.163	-1.289	-1.249
10	.335 U	-0.715	-0.716	-0.802	-0.895	-0.796	-0.906	-0.867
11	.500 U	-0.468	-0.416	-0.467	-0.539	-0.452	-0.537	-0.520
12	.625 U	-0.302	-0.208	-0.270	-0.346	-0.259	-0.355	-0.303
13	.769 U	-0.143	-0.025	-0.108	-0.177	-0.049	-0.194	-0.146
14	.915 U	0.078	0.175	0.098	-0.003	0.126	0.011	-0.004
15	.960 U	0.134	0.192	0.115	0.042	0.163	0.035	0.009
16	.008 L	0.998	0.973	0.776	0.621	0.636	0.482	0.297
17	.017 L	0.991	0.959	0.992	0.917	0.970	0.938	0.956
18	.040 L	0.778	0.977	0.955	0.913	0.952	0.928	0.992
19	.065 L	0.637	0.888	0.860	0.810	0.843	0.825	0.882
20	.090 L	0.484	0.732	0.718	0.673	0.723	0.702	0.790
21	.130 L	0.374	0.601	0.601	0.552	0.623	0.599	0.684
22	.168 L	0.307	0.526	0.527	0.460	0.500	0.487	0.568
23	.233 L	0.207	0.392	0.402	0.333	0.390	0.345	0.459
24	.335 L	0.193	0.356	0.377	0.29[illegible]	0.322	0.295	0.370
25	.500 L	0.168	0.302	0.313	0.173	0.206	0.203	0.261
26	.625 L	0.100	0.217	0.225	0.074	0.110	0.087	0.134
27	.769 L	0.171	0.285	0.271	0.124	0.146	0.127	0.156
28	.915 L	0.204	0.300	0.286	0.139	0.147	0.107	0.150
29	.960 L	0.311	0.410	0.400	0.270	0.219	0.199	0.218

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

		RUN 2 15	RUN 2 16	RUN 2 17	RUN 2 18	RUN 2 19	RUN 2 20	RUN 2 21
	MU	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	AU	16.0	17.0	18.0	19.0	20.0	21.0	22.0
	M	0.304	0.304	0.305	0.306	0.306	0.306	0.307
	A	16.04	17.04	18.03	19.03	20.03	21.03	22.03
	QO	128.4	128.4	129.2	130.0	130.0	130.0	130.8
	PO	1985.6	1985.6	1984.7	1983.9	1983.9	1983.9	1983.1
TAP	X/C	CP	CP	CP	CP	CP	CP	CP
1	.000	-0.878	-0.794	-0.817	-0.896	-0.917	-0.984	-1.009
2	.008 U	-0.718	-0.628	-0.670	-0.715	-0.723	-0.737	-0.720
3	.017 U	-0.760	-0.623	-0.669	-0.717	-0.702	-0.712	-0.723
4	.040 U	-0.709	-0.636	-0.668	-0.702	-0.681	-0.701	-0.688
5	.065 U	-0.705	-0.646	-0.668	-0.678	-0.687	-0.707	-0.694
6	.090 U	-0.712	-0.653	-0.674	-0.685	-0.690	-0.694	-0.684
7	.130 U	-0.722	-0.666	-0.653	-0.681	-0.707	-0.700	-0.697
8	.168 U	-0.677	-0.649	-0.667	-0.701	-0.686	-0.703	-0.700
9	.233 U	-0.676	-0.683	-0.708	-0.715	-0.706	-0.713	-0.724
10	.335 U	-0.697	-0.669	-0.690	-0.738	-0.737	-0.737	-0.764
11	.500 U	-0.721	-0.734	-0.724	-0.759	-0.761	-0.777	-0.791
12	.625 U	-0.731	-0.742	-0.745	-0.817	-0.812	-0.842	-0.836
13	.769 U	-0.691	-0.739	-0.777	-0.849	-0.844	-0.867	-0.857
14	.915 U	-0.543	-0.626	-0.696	-0.830	-0.842	-0.879	-0.882
15	.960 U	-0.489	-0.592	-0.683	-0.820	-0.846	-0.879	-0.879
16	.008 L	0.888	0.850	0.830	0.841	0.849	0.825	0.836
17	.017 L	0.984	0.981	0.947	0.972	0.979	0.969	0.966
18	.040 L	0.995	0.953	0.926	0.958	0.941	0.951	0.959
19	.065 L	0.849	0.807	0.788	0.817	0.797	0.801	0.822
20	.090 L	0.755	0.703	0.698	0.693	0.687	0.681	0.688
21	.130 L	0.605	0.543	0.553	0.541	0.529	0.530	0.528
22	.168 L	0.518	0.463	0.442	0.438	0.419	0.431	0.442
23	.233 L	0.390	0.348	0.308	0.307	0.285	0.283	0.295
24	.335 L	0.282	0.230	0.200	0.162	0.134	0.160	0.165
25	.500 L	0.160	0.098	0.073	0.008	-0.014	-0.015	-0.016
26	.625 L	0.094	0.025	-0.010	-0.078	-0.099	-0.124	-0.111
27	.769 L	0.029	-0.030	-0.075	-0.150	-0.191	-0.219	-0.196
28	.915 L	-0.043	-0.109	-0.146	-0.241	-0.289	-0.313	-0.307
29	.960 L	0.017	-0.063	-0.122	-0.223	-0.271	-0.303	-0.303

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 2 22	RUN 2 23	RUN 2 25	RUN 3 26	RUN 3 27	RUN 3 28	RUN 3 29
	MU 0.30	MU 0.30	MU 0.30	MU 0.40	MU 0.40	MU 0.40	MU 0.40
	AU 24.0	AU 26.0	AU 0.	AU 0.	AU -2.0	AU -4.0	AU 0.
	M 0.307	M 0.309	M 0.301	M 0.401	M 0.401	M 0.401	M 0.401
	A 24.02	A 26.02	A 0.	A 0.	A -2.02	A -4.05	A 0.
	QO 130.8	QO 132.4	QO 126.1	QO 213.3	QO 213.3	QO 213.3	QO 213.3
	PO 1983.1	PO 1981.4	PO 1988.0	PO 1895.0	PO 1895.0	PO 1895.0	PO 1895.0
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	-1.004	-1.091	0.973	1.019	0.901	0.417	1.019
2 .008 U	-0.769	-0.830	0.254	0.289	0.711	0.957	0.299
3 .017 U	-0.769	-0.815	-0.086	-0.062	0.394	0.721	-0.031
4 .040 U	-0.741	-0.801	-0.348	-0.361	0.020	0.337	-0.355
5 .065 U	-0.740	-0.790	-0.394	-0.388	-0.116	0.159	-0.390
6 .090 U	-0.747	-0.807	-0.415	-0.457	-0.214	0.040	-0.438
7 .130 U	-0.740	-0.796	-0.542	-0.434	-0.281	-0.021	-0.378
8 .168 U	-0.750	-0.799	-0.394	-0.430	-0.252	-0.082	-0.384
9 .233 U	-0.770	-0.819	-0.383	-0.405	-0.273	-0.126	-0.390
10 .335 U	-0.790	-0.802	-0.305	-0.321	-0.221	-0.105	-0.298
11 .500 U	-0.793	-0.822	-0.231	-0.234	-0.211	-0.122	-0.200
12 .625 U	-0.834	-0.843	-0.149	-0.158	-0.157	-0.081	-0.148
13 .769 U	-0.824	-0.843	-0.057	-0.046	-0.040	-0.007	-0.037
14 .915 U	-0.843	-0.818	0.070	0.063	0.103	0.113	0.094
15 .960 U	-0.864	-0.815	0.162	0.180	0.178	0.199	0.197
16 .008 L	0.810	0.721	0.159	0.155	-0.509	-1.423	0.140
17 .017 L	0.956	0.970	-0.160	-0.179	-0.806	-1.596	-0.209
18 .040 L	0.942	0.950	-0.365	-0.384	-0.847	-1.387	-0.422
19 .065 L	0.836	0.851	-0.454	-0.461	-0.934	-1.232	-0.493
20 .090 L	0.690	0.767	-0.461	-0.474	-0.792	-1.130	-0.503
21 .130 L	0.544	0.662	-0.454	-0.480	-0.742	-0.994	-0.497
22 .168 L	0.455	0.530	-0.411	-0.428	-0.656	-0.856	-0.445
23 .233 L	0.306	0.402	-0.411	-0.424	-0.596	-0.753	-0.424
24 .335 L	0.180	0.317	-0.326	-0.338	-0.464	-0.580	-0.334
25 .500 L	-0.007	0.108	-0.234	-0.234	-0.326	-0.398	-0.225
26 .625 L	-0.119	-0.050	-0.142	-0.169	-0.220	-0.267	-0.188
27 .769 L	-0.234	-0.124	-0.036	-0.035	-0.082	-0.117	-0.050
28 .915 L	-0.332	-0.271	0.092	0.099	0.071	0.063	0.088
29 .960 L	-0.287	-0.223	0.194	0.203	0.159	0.150	0.193

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 3 30	RUN 3 31	RUN 3 32	RUN 3 33	RUN 3 34	RUN 3 [illegible]	RUN 3 36
MU	0.40	0.40	0.40	0.40	0.40	0.[illegible]	0.40
AU	2.0	4.0	6.0	8.0	10.0	11.[illegible]	12.0
M	0.401	0.401	0.401	0.402	0.402	0.402	0.403
A	2.01	4.03	6.04	8.06	10.07	11.07	12.07
QO	213.3	213.3	213.3	214.2	214.2	214.2	215.2
PO	1895.0	1895.0	1895.0	1894.0	1894.0	1894.0	1892.9
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	0.969	0.561	-0.201	-1.145	-2.040	-2.337	-2.304
2 .008 U	-0.344	-1.226	-2.441	-3.653	-5.153	-5.625	-3.984
3 .017 U	-0.647	-1.397	-2.353	-3.475	-4.849	-5.315	-3.300
4 .040 U	-0.839	-1.374	-2.006	-2.615	-3.025	-3.363	-2.966
5 .065 U	-0.753	-1.177	-1.578	-2.098	-2.446	-2.516	-2.772
6 .090 U	-0.759	-1.096	-1.427	-1.641	-2.100	-2.158	-2.536
7 .130 U	-0.648	-0.889	-1.177	-1.467	-1.654	-1.721	-1.967
8 .168 U	-0.592	-0.803	-0.986	-1.277	-1.433	-1.475	-1.670
9 .233 U	-0.564	-0.719	-0.838	-1.060	-1.170	-1.188	-1.248
10 .335 U	-0.431	-0.523	-0.598	-0.766	-0.827	-0.847	-0.838
11 .500 U	-0.301	-0.343	-0.358	-0.490	-0.520	-0.522	-0.520
12 .625 U	-0.195	-0.251	-0.222	-0.353	-0.344	-0.338	-0.359
13 .769 U	-0.090	-0.103	-0.062	-0.162	-0.151	-0.151	-0.192
14 .915 U	0.087	0.082	0.127	0.055	0.034	-0.012	-0.080
15 .960 U	0.160	0.154	0.201	0.109	0.038	0.012	-0.031
16 .008 L	0.610	0.918	0.984	0.991	0.903	0.852	0.842
17 .017 L	0.289	0.652	0.890	0.985	0.982	0.982	0.982
18 .040 L	-0.033	0.322	0.581	0.757	0.880	0.910	0.923
19 .065 L	-0.167	0.134	0.387	0.575	0.723	0.755	0.779
20 .090 L	-0.223	0.042	0.269	0.439	0.594	0.638	0.658
21 .130 L	-0.263	-0.034	0.146	0.309	0.462	0.511	0.519
22 .168 L	-0.261	-0.074	0.112	0.248	0.374	0.433	0.429
23 .233 L	-0.295	-0.128	0.020	0.140	0.265	0.304	0.312
24 .335 L	-0.224	-0.103	0.005	0.101	0.206	0.237	0.218
25 .500 L	-0.168	-0.078	-0.004	0.063	0.133	0.161	0.126
26 .625 L	-0.138	-0.080	-0.020	0.041	0.077	0.090	0.068
27 .769 L	-0.030	0.020	0.055	0.083	0.127	0.145	0.093
28 .915 L	0.090	0.121	0.125	0.153	0.156	0.167	0.120
29 .960 L	0.201	0.224	0.232	0.241	0.265	0.264	0.230

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 3 37	RUN 3 38	RUN 3 39	RUN 3 40	RUN 3 41	RUN 3 42	RUN 3 43
	MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.40
	AU 13.0	AU 14.0	AU 15.0	AU 16.0	AU 17.0	AU 18.0	AU 19.0
	M 0.404	M 0.405	M 0.406	M 0.407	M 0.407	M 0.408	M 0.408
	A 13.06	A 14.06	A 15.05	A 16.05	A 17.04	A 18.03	A 19.03
	QO 216.2	QO 217.1	QO 218.1	QO 219.0	QO 219.0	QO 220.0	QO 220.0
	PO 1891.9	PO 1890.8	PO 1889.8	PO 1888.8	PO 1888.8	PO 1887.7	PO 1887.7
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	-1.912	-1.848	-1.749	-1.268	-1.018	-0.964	-0.805
2 .008 U	-2.715	-2.953	-2.645	-1.680	-1.173	-1.011	-0.701
3 .017 U	-2.452	-2.679	-2.384	-1.488	-0.942	-0.854	-0.700
4 .040 U	-2.137	-1.811	-1.678	-1.087	-0.785	-0.740	-0.647
5 .065 U	-2.014	-1.529	-1.448	-0.919	-0.728	-0.711	-0.634
6 .090 U	-1.892	-1.366	-1.292	-0.876	-0.722	-0.707	-0.644
7 .130 U	-1.733	-1.310	-1.106	-0.900	-0.719	-0.698	-0.660
8 .168 U	-1.518	-1.102	-1.050	-0.810	-0.721	-0.700	-0.637
9 .233 U	-1.280	-0.980	-0.968	-0.810	-0.741	-0.698	-0.633
10 .335 U	-0.976	-0.861	-0.870	-0.816	-0.764	-0.713	-0.649
11 .500 U	-0.664	-0.712	-0.773	-0.811	-0.805	-0.782	-0.707
12 .625 U	-0.507	-0.628	-0.702	-0.777	-0.823	-0.809	-0.746
13 .769 U	-0.362	-0.504	-0.591	-0.696	-0.800	-0.795	-0.753
14 .915 U	-0.254	-0.393	-0.488	-0.562	-0.686	-0.710	-0.716
15 .960 U	-0.230	-0.361	-0.426	-0.522	-0.650	-0.666	-0.692
16 .008 L	0.810	0.846	0.847	0.871	0.890	0.904	0.923
17 .017 L	0.988	0.983	0.986	0.990	0.991	0.988	0.979
18 .040 L	0.894	0.924	0.925	0.911	0.909	0.920	0.930
19 .065 L	0.745	0.792	0.797	0.790	0.769	0.790	0.798
20 .090 L	0.625	0.655	0.664	0.659	0.667	0.670	0.677
21 .130 L	0.484	0.517	0.522	0.528	0.520	0.534	0.547
22 .168 L	0.390	0.430	0.446	0.426	0.424	0.442	0.464
23 .233 L	0.295	0.304	0.315	0.297	0.300	0.306	0.330
24 .335 L	0.189	0.205	0.206	0.195	0.186	0.198	0.198
25 .500 L	0.091	0.101	0.101	0.074	0.043	0.056	0.060
26 .625 L	0.045	0.060	0.027	0.017	-0.020	-0.023	-0.029
27 .769 L	0.036	0.024	0.001	-0.033	-0.078	-0.097	-0.101
28 .915 L	0.031	0.006	-0.026	-0.079	-0.144	-0.155	-0.179
29 .960 L	0.129	0.071	0.028	-0.041	-0.106	-0.115	-0.138

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

			RUN 3 44	RUN 3 45	RUN 3 46	RUN 3 47	RUN 3 48	RUN 3 49	RUN 4 50
			MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.50
			AU 20.0	AU 22.0	AU 24.0	AU 26.0	AU 28.0	AU 0.	AU 0.
			M 0.409	M 0.410	M 0.411	M 0.414	M 0.416	M 0.401	M 0.501
			A 20.03	A 22.03	A 24.02	A 26.02	A 28.02	A 0.	A 0.
			QO 220.9	QO 221.9	QO 222.8	QO 225.7	QO 227.7	QO 213.3	QO 313.4
			PO 1886.7	PO 1885.6	PO 1884.6	PO 1881.4	PO 1879.3	PO 1895.0	PO 1783.5
TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		-1.247	-0.879	-0.966	-1.216	-1.329	1.032	1.052
2	.008	U	-1.149	-0.654	-0.738	-0.905	-0.955	0.291	0.329
3	.017	U	-1.100	-0.702	-0.763	-0.900	-0.952	-0.054	-0.014
4	.040	U	-0.972	-0.626	-0.708	-0.883	-0.929	-0.388	-0.372
5	.065	U	-0.985	-0.618	-0.702	-0.863	-0.934	-0.417	-0.411
6	.090	U	-0.989	-0.626	-0.696	-0.875	-0.937	-0.463	-0.482
7	.130	U	-0.940	-0.682	-0.701	-0.835	-0.900	-0.486	-0.444
8	.168	U	-1.013	-0.621	-0.705	-0.866	-0.923	-0.426	-0.428
9	.233	U	-0.956	-0.647	-0.723	-0.887	-0.946	-0.399	-0.420
10	.335	U	-0.945	-0.654	-0.732	-0.897	-0.955	-0.309	-0.333
11	.500	U	-0.774	-0.684	-0.746	-0.905	-0.963	-0.265	-0.224
12	.625	U	-0.736	-0.703	-0.756	-0.917	-0.969	-0.175	-0.166
13	.769	U	-0.716	-0.726	-0.773	-0.925	-0.972	-0.052	-0.056
14	.915	U	-0.698	-0.743	-0.757	-0.694	-0.953	0.067	0.084
15	.960	U	-0.688	-0.746	-0.745	-0.885	-0.948	0.180	0.194
16	.008	L	0.873	0.898	0.863	0.730	0.631	0.188	0.194
17	.017	L	0.983	0.969	0.983	0.991	0.962	-0.165	-0.180
18	.040	L	0.921	0.950	0.963	0.990	0.997	-0.367	-0.394
19	.065	L	0.799	0.837	0.868	0.915	0.942	-0.459	-0.485
20	.090	L	0.674	0.724	0.740	0.818	0.869	-0.463	-0.511
21	.130	L	0.538	0.587	0.622	0.703	0.753	-0.476	-0.518
22	.168	L	0.443	0.494	0.528	0.610	0.670	-0.430	-0.472
23	.233	L	0.318	0.367	0.395	0.470	0.543	-0.428	-0.468
24	.335	L	0.200	0.232	0.261	0.320	0.388	-0.344	-0.367
25	.500	L	0.036	0.066	0.083	0.128	0.186	-0.236	-0.259
26	.625	L	-0.055	-0.026	-0.035	0.000	0.030	-0.146	-0.170
27	.769	L	-0.129	-0.128	-0.134	-0.119	-0.083	-0.041	-0.049
28	.915	L	-0.204	-0.227	-0.229	-0.280	-0.271	0.103	0.103
29	.960		-0.165	-0.179	-0.188	-0.204	-0.188	0.209	0.205

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 4 51	RUN 4 52	RUN 4 53	RUN 4 54	RUN 4 55	RUN 4 56	RUN 4 57
	MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50
	AU -2.0	AU -4.0	AU 0.	AU 2.0	AU 4.0	AU 6.0	AU 7.0
	M 0.502	M 0.502	M 0.501	M 0.502	M 0.502	M 0.502	M 0.502
	A -2.02	A -4.03	A 0.	A 2.01	A 4.03	A 6.05	A 7.06
	Q0 314.4	Q0 314.4	Q0 313.4	Q0 314.4	Q0 314.4	Q0 314.4	Q0 314.4
	P0 1782.3	P0 1782.3	P0 1783.5	P0 1782.3	P0 1782.3	P0 1782.3	P0 1782.3
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	0.937	0.475	1.053	1.008	0.616	0.005	0.014
2 .008 U	0.744	0.991	0.334	-0.227	-1.207	-2.366	-2.368
3 .017 U	0.417	0.758	-0.018	-0.545	-1.451	-2.584	-2.587
4 .040 U	0.021	0.360	-0.373	-0.849	-1.521	-2.327	-2.314
5 .065 U	-0.117	0.198	-0.410	-0.758	-1.302	-1.770	-1.764
6 .090 U	-0.227	0.057	-0.488	-0.785	-1.220	-1.606	-1.603
7 .130 U	-0.342	-0.072	-0.465	-0.591	-0.953	-1.248	-1.244
8 .168 U	-0.254	-0.050	-0.427	-0.618	-0.899	-1.134	-1.129
9 .233 U	-0.274	-0.111	-0.426	-0.583	-0.782	-0.964	-0.957
10 .335 U	-0.227	-0.090	-0.328	-0.434	-0.583	-0.705	-0.698
11 .500 U	-0.181	-0.086	-0.231	-0.290	-0.384	-0.463	-0.452
12 .625 U	-0.135	-0.056	-0.160	-0.202	-0.267	-0.321	-0.311
13 .769 U	-0.038	0.016	-0.059	-0.086	-0.110	-0.143	-0.142
14 .915 U	0.101	0.122	0.100	0.093	0.080	0.047	0.050
15 .960 U	0.197	0.226	0.199	0.181	0.176	0.126	0.131
16 .008 L	-0.460	-1.441	0.175	0.604	0.942	0.964	0.961
17 .017 L	-0.784	-1.709	-0.200	0.228	0.680	0.888	0.889
18 .040 L	-0.863	-1.520	-0.411	-0.043	0.346	0.592	0.597
19 .065 L	-0.894	-1.379	-0.512	-0.183	0.170	0.385	0.386
20 .090 L	-0.853	-1.235	-0.528	-0.241	0.067	0.259	0.266
21 .130 L	-0.777	-1.092	-0.532	-0.309	-0.018	0.156	0.155
22 .168 L	-0.681	-0.931	-0.475	-0.285	-0.044	0.105	0.100
23 .233 L	-0.618	-0.827	-0.469	-0.329	-0.108	0.024	0.025
24 .335 L	-0.484	-0.618	-0.367	-0.256	-0.093	-0.001	-0.002
25 .500 L	-0.350	-0.423	-0.261	-0.182	-0.066	-0.008	-0.014
26 .625 L	-0.223	-0.272	-0.178	-0.128	-0.036	-0.005	-0.002
27 .769 L	-0.083	-0.114	-0.060	-0.033	0.048	0.052	0.052
28 .915 L	0.093	0.076	0.084	0.088	0.139	0.126	0.127
29 .960 L	0.182	0.166	0.202	0.215	0.266	0.255	0.252

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 4 58	RUN 4 59	RUN 4 60	RUN 4 61	RUN 4 62	RUN 4 63	RUN 4 64
	MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50
	AU 8.0	AU 9.0	AU 10.0	AU 11.0	AU 12.0	AU 13.0	AU 14.0
	M 0.502	M 0.503	M 0.504	M 0.505	M 0.506	M 0.507	M 0.508
	A 8.06	A 9.07	A 10.07	A 11.07	A 12.06	A 13.05	A 14.05
	QO 314.4	QO 315.4	QO 316.5	QO 317.5	QO 318.6	QO 319.6	QO 320.7
	PO 1782.3	PO 1781.1	PO 1779.9	PO 1778.7	PO 1777.5	PO 1776.3	PO 1775.1
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	-0.537	-0.755	-0.895	-0.924	-0.909	-0.854	-0.819
2 .008 U	-3.097	-3.396	-3.451	-3.060	-2.410	-1.834	-1.495
3 .017 U	-3.463	-3.738	-3.651	-2.726	-1.996	-1.565	-1.389
4 .040 U	-3.371	-3.504	-3.357	-2.263	-1.704	-1.388	-1.202
5 .065 U	-2.944	-2.978	-2.527	-2.119	-1.674	-1.390	-1.203
6 .090 U	-1.774	-2.268	-2.271	-2.015	-1.454	-1.395	-1.207
7 .130 U	-1.493	-1.603	-1.786	-1.758	-1.611	-1.382	-1.202
8 .168 U	-1.295	-1.344	-1.560	-1.533	-1.424	-1.270	-1.117
9 .233 U	-1.089	-1.089	-1.204	-1.218	-1.206	-1.117	-1.035
10 .335 U	-0.787	-0.792	-0.860	-0.854	-0.906	-0.899	-0.878
11 .500 U	-0.503	-0.488	-0.540	-0.527	-0.611	-0.663	-0.728
12 .625 U	-0.344	-0.327	-0.371	-0.387	-0.472	-0.549	-0.649
13 .769 U	-0.167	-0.161	-0.235	-0.278	-0.361	-0.458	-0.544
14 .915 U	0.006	0.001	-0.137	-0.190	-0.281	-0.366	-0.455
15 .960 U	0.056	0.024	-0.108	-0.166	-0.256	-0.328	-0.411
16 .008 L	0.967	0.960	0.989	0.966	0.972	0.974	0.981
17 .017 L	0.985	0.969	0.985	0.968	0.976	0.961	0.962
18 .040 L	0.740	0.810	0.777	0.855	0.856	0.891	0.897
19 .065 L	0.531	0.618	0.589	0.686	0.684	0.720	0.732
20 .090 L	0.419	0.503	0.464	0.566	0.560	0.597	0.616
21 .130 L	0.293	0.370	0.325	0.421	0.422	0.452	0.475
22 .168 L	0.210	0.283	0.243	0.336	0.330	0.360	0.391
23 .233 L	0.125	0.181	0.133	0.223	0.213	0.243	0.255
24 .335 L	0.078	0.125	0.056	0.144	0.124	0.154	0.151
25 .500 L	0.028	0.065	0.000	0.037	0.038	0.064	0.056
26 .625 L	0.012	0.044	-0.025	0.039	0.000	0.003	-0.001
27 .769 L	0.054	0.081	-0.006	0.031	-0.015	-0.022	-0.026
28 .915 L	0.125	0.137	0.026	0.051	-0.020	-0.041	-0.057
29 .960 L	0.237	0.247	0.130	0.169	0.086	0.078	0.049

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

		RUN 4 65	RUN 4 66	RUN 4 67	RUN 4 68	RUN 4 69	RUN 4 70	RUN 4 71
		MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50	MU 0.50
		AU 15.0	AU 16.0	AU 17.0	AU 18.0	AU 20.0	AU 22.0	AU 24.0
		M 0.509	M 0.510	M 0.511	M 0.512	M 0.514	M 0.515	M 0.518
		A 15.05	A 16.04	A 17.04	A 18.03	A 20.03	A 22.03	A 24.02
		QO 321.7	QO 322.8	QO 323.8	QO 324.9	QO 326.9	QO 328.0	QO 331.1
		PO 1773.9	PO 1772.7	PO 1771.5	PO 1770.3	PO 1767.9	PO 1766.7	PO 1763.0
TAP	X/C	CP	CP	CP	CP	CP	CP	CP
1	.000	-0.806	-0.862	-0.899	-0.875	-0.807	-0.876	-1.036
2	.008 U	-1.287	-1.345	-1.415	-1.243	-0.775	-0.750	-0.901
3	.017 U	-1.254	-1.299	-1.269	-1.079	-0.831	-0.828	-0.983
4	.040 U	-1.054	-1.074	-1.036	-0.862	-0.692	-0.719	-0.896
5	.065 U	-1.062	-1.053	-1.001	-0.786	-0.674	-0.722	-0.850
6	.090 U	-1.066	-1.039	-0.979	-0.772	-0.663	-0.723	-0.855
7	.130 U	-1.087	-1.016	-0.970	-0.788	-0.689	-0.728	-0.804
8	.168 U	-1.008	-0.991	-0.926	-0.748	-0.667	-0.732	-0.851
9	.233 U	-0.941	-0.939	-0.876	-0.742	-0.669	-0.730	-0.869
10	.335 U	-0.869	-0.882	-0.848	-0.739	-0.683	-0.746	-0.874
11	.500 U	-0.758	-0.787	-0.794	-0.792	-0.721	-0.754	-0.882
12	.625 U	-0.689	-0.724	-0.759	-0.800	-0.758	-0.766	-0.900
13	.769 U	-0.608	-0.652	-0.701	-0.782	-0.774	-0.796	-0.909
14	.915 U	-0.507	-0.559	-0.605	-0.705	-0.758	-0.797	-0.879
15	.960 U	-0.456	-0.512	-0.576	-0.666	-0.739	-0.794	-0.865
16	.008 L	0.989	0.994	0.992	0.991	0.990	0.936	0.887
17	.017 L	0.958	0.960	0.961	0.960	0.956	0.963	0.953
18	.040 L	0.897	0.914	0.925	0.928	0.960	0.982	0.983
19	.065 L	0.741	0.762	0.772	0.778	0.813	0.850	0.911
20	.090 L	0.614	0.647	0.649	0.657	0.701	0.742	0.804
21	.130 L	0.487	0.509	0.512	0.524	0.564	0.598	0.682
22	.168 L	0.397	0.423	0.430	0.435	0.470	0.497	0.597
23	.233 L	0.276	0.279	0.294	0.307	0.331	0.356	0.447
24	.335 L	0.176	0.178	0.187	0.187	0.219	0.218	0.300
25	.500 L	0.058	0.060	0.064	0.057	0.066	0.058	0.127
26	.625 L	-0.003	-0.017	-0.021	-0.028	-0.032	-0.048	0.003
27	.769 L	-0.037	-0.061	-0.069	-0.092	-0.116	-0.141	-0.117
28	.915 L	-0.083	-0.116	-0.142	-0.182	-0.212	-0.265	-0.263
29	.960 L	0.027	0.002	-0.023	-0.061	-0.098	-0.142	-0.152

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 4 72	RUN 20 263	RUN 20 264	RUN 20 265	RUN 20 266	RUN 20 267	RUN 20 268
	MU 0.50	MU 0.60	MU 0.60	MU 0.60	MU 0.60	MU 0.60	MU 0.60
	AU 0.	AU 0.	AU -2.0	AU -4.0	AU 0.	AU 1.0	AU 2.0
	M 0.502	M 0.602	M 0.602	M 0.603	M 0.602	M 0.602	M 0.603
	A 0.	A 0.	A -2.02	A -4.04	A 0.	A 1.01	A 2.02
	QO 314.4	QO 421.6	QO 421.6	QO 422.6	QO 421.6	QO 421.6	QO 422.6
	PO 1782.3	PO 1661.8	PO 1661.8	PO 1660.5	PO 1661.8	PO 1661.8	PO 1660.5
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	1.052	1.076	0.973	0.629	1.077	1.071	1.012
2 .008 U	0.352	0.294	0.722	0.975	0.324	0.045	-0.298
3 .017 U	0.004	-0.060	0.423	0.739	-0.039	-0.317	-0.663
4 .040 U	-0.364	-0.428	0.012	0.352	-0.413	-0.674	-0.996
5 .065 U	-0.401	-0.509	-0.145	0.166	-0.486	-0.700	-0.960
6 .090 U	-0.476	-0.558	-0.220	0.053	-0.534	-0.721	-0.938
7 .130 U	-0.520	-0.718	-0.395	-0.129	-0.426	-0.620	-0.807
8 .168 U	-0.421	-0.540	-0.295	-0.086	-0.501	-0.640	-0.776
9 .233 U	-0.415	-0.508	-0.323	-0.136	-0.500	-0.603	-0.697
10 .335 U	-0.329	-0.409	-0.274	-0.140	-0.386	-0.456	-0.528
11 .500 U	-0.231	-0.343	-0.217	-0.128	-0.272	-0.325	-0.370
12 .625 U	-0.170	-0.244	-0.174	-0.110	-0.191	-0.229	-0.254
13 .769 U	-0.056	-0.094	-0.058	-0.014	-0.078	-0.105	-0.116
14 .915 U	0.087	0.055	0.079	0.100	0.089	0.068	0.064
15 .960 U	0.187	0.166	0.186	0.214	0.189	0.176	0.169
16 .008 L	0.167	0.241	-0.376	-1.109	0.234	0.461	0.677
17 .017 L	-0.202	-0.167	-0.801	-1.564	-0.184	0.086	0.323
18 .040 L	-0.394	-0.405	-0.951	-1.666	-0.431	-0.201	0.021
19 .065 L	-0.519	-0.516	-1.024	-1.891	-0.524	-0.336	-0.149
20 .090 L	-0.520	-0.564	-0.950	-1.504	-0.566	-0.391	-0.227
21 .130 L	-0.536	-0.594	-0.907	-1.199	-0.601	-0.455	-0.307
22 .168 L	-0.483	-0.532	-0.779	-1.036	-0.539	-0.412	-0.299
23 .233 L	-0.472	-0.533	-0.721	-0.913	-0.540	-0.446	-0.353
24 .335 L	-0.370	-0.413	-0.555	-0.676	-0.415	-0.361	-0.287
25 .500 L	-0.258	-0.289	-0.377	-0.451	-0.296	-0.261	-0.206
26 .625 L	-0.177	-0.201	-0.257	-0.300	-0.194	-0.183	-0.150
27 .769 L	-0.046	-0.089	-0.104	-0.133	-0.078	-0.060	-0.045
28 .915 L	0.110	0.074	0.067	0.071	0.093	0.080	0.098
29 .960 L	0.211	0.191	0.176	0.157	0.198	0.195	0.201

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 20 269	RUN 20 270	RUN 20 271	RUN 20 272	RUN 20 273	RUN 20 274	RUN 20 275
MU	0.60	0.60	0.60	0.60	0.60	0.60	0.60
AU	4.0	6.0	8.0	10.0	11.0	12.0	13.0
M	0.603	0.604	0.605	0.609	0.610	0.612	0.614
A	4.04	6.06	8.07	10.06	11.05	12.05	13.05
QO	422.6	423.7	424.8	429.1	430.1	432.3	434.4
PO	1660.5	1659.2	1657.9	1652.7	1651.4	1648.7	1646.1
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	0.688	0.336	0.099	-0.053	-0.116	-0.186	-0.242
2 .008 U	-1.052	-1.687	-1.984	-2.127	-2.144	-1.996	-1.750
3 .017 U	-1.444	-2.037	-2.279	-2.330	-2.183	-1.797	-1.505
4 .040 U	-1.776	-2.279	-2.513	-2.168	-1.790	-1.387	-1.037
5 .065 U	-1.772	-2.423	-2.590	-1.806	-1.439	-1.244	-0.944
6 .090 U	-1.573	-2.371	-2.499	-1.622	-1.350	-1.211	-0.945
7 .130 U	-1.102	-1.832	-2.167	-1.728	-1.410	-1.243	-1.038
8 .168 U	-1.036	-1.560	-1.763	-1.324	-1.178	-1.127	-0.927
9 .233 U	-0.915	-0.889	-1.306	-1.151	-1.058	-1.057	-0.911
10 .335 U	-0.659	-0.706	-0.775	-0.925	-0.913	-0.947	-0.889
11 .500 U	-0.457	-0.493	-0.477	-0.659	-0.723	-0.770	-0.828
12 .625 U	-0.312	-0.342	-0.331	-0.525	-0.615	-0.673	-0.774
13 .769 U	-0.145	-0.160	-0.178	-0.404	-0.511	-0.565	-0.684
14 .915 U	0.051	0.035	-0.030	-0.311	-0.408	-0.461	-0.564
15 .960 U	0.136	0.109	0.025	-0.276	-0.374	-0.422	-0.505
16 .008 L	0.953	0.960	0.948	0.947	0.944	0.941	0.947
17 .017 L	0.680	0.884	0.969	0.998	0.985	0.977	0.965
18 .040 L	0.356	0.578	0.692	0.750	0.777	0.814	0.837
19 .065 L	0.165	0.366	0.494	0.550	0.582	0.617	0.650
20 .090 L	0.066	0.256	0.382	0.434	0.464	0.498	0.534
21 .130 L	-0.047	0.141	0.250	0.298	0.327	0.358	0.395
22 .168 L	-0.068	0.088	0.185	0.235	0.254	0.287	0.316
23 .233 L	-0.157	-0.017	0.074	0.109	0.130	0.153	0.180
24 .335 L	-0.147	-0.042	0.017	0.040	0.048	0.066	0.085
25 .500 L	-0.108	-0.033	0.004	-0.002	-0.001	0.005	0.014
26 .625 L	-0.079	-0.032	-0.007	-0.042	-0.053	-0.053	-0.058
27 .769 L	-0.001	0.021	0.028	-0.034	-0.060	-0.070	-0.089
28 .915 L	0.121	0.126	0.105	-0.010	-0.040	-0.069	-0.103
29 .960 L	0.234	0.233	0.211	0.093	0.067	0.038	0.015

S-58 AIRFOIL – TABULATION OF PRESSURE COEFFICIENTS

	RUN 20 276	RUN 20 277	RUN 20 278	RUN 20 279	RUN 8 126	RUN 8 127	RUN 8 128
MU	0.60	0.60	0.60	0.60	0.65	0.65	0.65
AU	14.0	15.0	16.0	0.	0.	-1.0	-2.0
M	0.615	0.616	0.617	0.602	0.653	0.653	0.653
A	14.05	15.05	16.04	0.	0.	-1.01	-2.02
QO	435.5	436.5	437.6	421.6	474.7	474.7	474.7
PO	1644.8	1643.5	1642.1	1661.8	1590.5	1590.5	1590.5

TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		-0.282	-0.341	-0.431	1.066	1.088	1.085	1.015
2	.008	U	-1.393	-1.194	-1.268	0.295	0.306	0.532	0.723
3	.017	U	-1.078	-1.013	-1.207	-0.060	-0.067	0.179	0.411
4	.040	U	-0.873	-0.814	-0.956	-0.437	-0.459	-0.226	-0.006
5	.065	U	-0.875	-0.822	-0.897	-0.506	-0.547	-0.343	-0.147
6	.090	U	-0.885	-0.840	-0.878	-0.554	-0.613	-0.438	-0.249
7	.130	U	-0.936	-0.9[illegible]	-0.820	-0.639	-0.626	-0.534	-0.370
8	.168	U	-0.877	-0.[illegible]	-0.824	-0.524	-0.583	-0.457	-0.315
9	.233	U	-0.835	-0.[illegible]	-0.828	-0.510	-0.555	-0.456	-0.339
10	.335	U	-0.830	-0.[illegible]	-0.799	-0.404	-0.425	-0.367	-0.283
11	.500	U	-0.823	-0.817	-0.817	-0.320	-0.294	-0.279	-0.204
12	.625	U	-0.810	-0.827	-0.838	-0.237	-0.219	-0.209	-0.160
13	.769	U	-0.759	-0.806	-0.832	-0.097	-0.081	-0.075	-0.043
14	.915	U	-0.646	-0.722	-0.758	0.054	0.084	0.075	0.098
15	.960	U	-0.586	-0.665	-0.707	0.171	0.194	0.184	0.204
16	.008	L	0.945	0.948	0.947	0.242	0.327	0.048	-0.243
17	.017	L	0.958	0.954	0.949	-0.147	-0.066	-0.363	-0.683
18	.040	L	0.861	0.880	0.904	-0.396	-0.345	-0.611	-0.896
19	.065	L	0.681	0.709	0.719	-0.529	-0.492	-0.740	-1.036
20	.090	L	0.558	0.586	0.612	-0.558	-0.535	-0.757	-1.001
21	.130	L	0.413	0.435	0.461	-0.596	-0.580	-0.778	-0.977
22	.168	L	0.341	0.364	0.382	-0.537	-0.530	-0.680	-0.831
23	.233	L	0.200	0.221	0.238	-0.534	-0.526	-0.655	-0.749
24	.335	L	0.095	0.107	0.124	-0.424	-0.407	-0.497	-0.560
25	.500	L	0.015	0.015	0.021	-0.301	-0.283	-0.352	-0.381
26	.625	L	-0.074	-0.077	-0.080	-0.213	-0.182	-0.228	-0.243
27	.769	L	-0.112	-0.124	-0.134	-0.075	-0.050	-0.082	-0.090
28	.915	L	-0.144	-0.171	-0.184	0.099	0.111	0.094	0.096
29	.960	L	-0.024	-0.065	-0.074	0.198	0.232	0.202	0.200

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

			RUN 8 129	RUN 8 130	RUN 8 131	RUN 8 132	RUN 8 133	RUN 8 134	RUN 8 135
			MU 0.65	MU 0.65	MU 0.65	MU 0.65	MU 0.65	MU 0.65	MU 0.65
			AU -3.0	AU -4.0	AU 0.	AU 1.0	AU 2.0	AU 3.0	AU 4.0
			M 0.653	M 0.654	M 0.653	M 0.653	M 0.653	M 0.653	M 0.654
			A -3.03	A -4.04	A 0.	A 1.01	A 2.02	A 3.03	A 4.05
			QO 474.7	QO 475.8	QO 474.7	QO 474.7	QO 474.7	QO 474.7	QO 475.8
			PO 1590.5	PO 1589.1	PO 1590.5	PO 1590.5	PO 1590.5	PO 1590.5	PO 1589.1
TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		0.895	0.752	1.095	1.086	1.021	0.898	0.769
2	.008	U	0.860	0.950	0.317	0.040	-0.281	-0.590	-0.849
3	.017	U	0.588	0.702	-0.053	-0.341	-0.669	-0.970	-1.248
4	.040	U	0.176	0.316	-0.455	-0.741	-1.083	-1.379	-1.611
5	.065	U	0.012	0.134	-0.531	-0.783	-1.113	-1.514	-1.739
6	.090	U	-0.095	0.021	-0.600	-0.816	-1.082	-1.469	-1.729
7	.130	U	-0.226	-0.114	-0.500	-0.688	-0.957	-1.202	-1.516
8	.168	U	-0.205	-0.120	-0.567	-0.711	-0.887	-1.035	-1.705
9	.233	U	-0.247	-0.175	-0.550	-0.664	-0.769	-0.861	-0.909
10	.335	U	-0.222	-0.168	-0.419	-0.491	-0.573	-0.639	-0.634
11	.500	U	-0.170	-0.141	-0.286	-0.334	-0.382	-0.429	-0.452
12	.625	U	-0.138	-0.131	-0.210	-0.237	-0.275	-0.307	-0.335
13	.769	U	-0.032	-0.027	-0.079	-0.093	-0.115	-0.139	-0.164
14	.915	U	0.093	0.097	0.095	0.090	0.077	0.057	0.032
15	.960	U	0.210	0.204	0.203	0.196	0.176	0.150	0.125
16	.008	L	-0.589	-0.863	0.306	0.533	0.724	0.859	0.930
17	.017	L	-1.038	-1.303	-0.092	0.174	0.387	0.555	0.664
18	.040	L	-1.210	-1.478	-0.366	-0.130	0.063	0.231	0.340
19	.065	L	-1.464	-1.686	-0.509	-0.300	-0.112	0.036	0.134
20	.090	L	-1.425	-1.717	-0.556	-0.358	-0.199	-0.066	0.029
21	.130	L	-1.246	-1.746	-0.603	-0.431	-0.283	-0.167	-0.084
22	.168	L	-0.928	-1.671	-0.542	-0.401	-0.290	-0.182	-0.113
23	.233	L	-0.865	-0.799	-0.548	-0.436	-0.346	-0.259	-0.202
24	.335	L	-0.638	-0.653	-0.420	-0.344	-0.278	-0.217	-0.192
25	.500	L	-0.426	-0.457	-0.296	-0.242	-0.203	-0.169	-0.164
26	.625	L	-0.278	-0.303	-0.200	-0.163	-0.143	-0.118	-0.127
27	.769	L	-0.114	-0.135	-0.074	-0.039	-0.037	-0.024	-0.047
28	.915	L	0.080	0.068	0.092	0.119	0.110	0.108	0.071
29	.960	L	0.177	0.163	0.203	0.229	0.218	0.223	0.182

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

		RUN	8 136	8 137	8 138	8 139	8 140	8 141	8 142
		MU	0.65	0.65	0.65	0.65	0.65	0.65	0.65
		AU	5.0	6.0	7.0	8.0	9.0	10.0	11.0
		M	0.655	0.656	0.657	0.658	0.661	0.662	0.664
		A	5.06	6.06	7.06	8.06	9.06	10.05	11.05
		QO	476.8	477.9	478.9	480.0	483.2	484.2	486.3
		PO	1587.8	1586.5	1585.1	1583.8	1579.7	1578.4	1575.7
TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		0.536	0.440	0.347	0.339	0.259	0.203	0.145
2	.008	U	-1.291	-1.432	-1.562	-1.549	-1.641	-1.715	-1.737
3	.017	U	-1.612	-1.732	-1.823	-1.817	-1.869	-1.863	-1.747
4	.040	U	-1.884	-1.985	-2.050	-2.041	-1.981	-1.759	-1.441
5	.065	U	-2.032	-2.127	-2.098	-2.077	-1.859	-1.583	-1.268
6	.090	U	-2.029	-2.102	-1.995	-1.969	-1.718	-1.450	-1.191
7	.130	U	-1.919	-2.054	-1.895	-1.833	-1.585	-1.371	-1.182
8	.168	U	-2.031	-2.100	-1.556	-1.528	-1.334	-1.190	-1.038
9	.233	U	-1.889	-1.581	-1.281	-1.273	-1.158	-1.065	-0.955
10	.335	U	-0.725	-0.924	-1.008	-0.999	-0.970	-0.934	-0.885
11	.500	U	-0.429	-0.448	-0.645	-0.654	-0.726	-0.768	-0.794
12	.625	U	-0.316	-0.323	-0.461	-0.465	-0.575	-0.670	-0.732
13	.769	U	-0.153	-0.179	-0.297	-0.302	-0.429	-0.544	-0.649
14	.915	U	0.022	-0.030	-0.175	-0.176	-0.309	-0.426	-0.539
15	.960	U	0.102	0.031	-0.134	-0.138	-0.272	-0.386	-0.491
16	.008	L	0.958	0.949	0.940	0.944	0.939	0.933	0.932
17	.017	L	0.853	0.894	0.926	0.923	0.954	0.978	0.999
18	.040	L	0.540	0.593	0.631	0.634	0.671	0.714	0.745
19	.065	L	0.338	0.406	0.437	0.435	0.481	0.525	0.546
20	.090	L	0.229	0.289	0.323	0.324	0.363	0.401	0.428
21	.130	L	0.111	0.156	0.193	0.194	0.234	0.260	0.288
22	.168	L	0.062	0.096	0.133	0.134	0.167	0.191	0.223
23	.233	L	-0.042	-0.009	0.012	0.012	0.044	0.062	0.090
24	.335	L	-0.068	-0.049	-0.043	-0.040	-0.018	-0.011	0.003
25	.500	L	-0.067	-0.064	-0.068	-0.069	-0.058	-0.067	-0.061
26	.625	L	-0.045	-0.061	-0.071	-0.072	-0.081	-0.091	-0.103
27	.769	L	0.019	-0.008	-0.037	-0.040	-0.063	-0.091	-0.113
28	.915	L	0.126	0.088	0.035	0.037	-0.011	-0.059	-0.103
29	.960	L	0.245	0.215	0.157	0.159	0.105	0.063	0.024

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 8 143	RUN 8 144	RUN 8 145	RUN 8 146	RUN 8 147	RUN 8 148	RUN 8 149
	MU 0.65	MU 0.65	MU 0.65	MU 0.65	MU 0.65	MU 0.65	MU 0.65
	AU 12.0	AU 13.0	AU 14.0	AU 15.0	AU 16.0	AU 17.0	AU 18.0
	M 0.666	M 0.668	M 0.669	M 0.671	M 0.673	M 0.674	M 0.675
	A 12.04	A 13.04	A 14.04	A 15.04	A 16.04	A 17.04	A 18.04
	QO 488.4	QO 490.5	QO 491.5	QO 493.6	QO 495.7	QO 496.8	QO 497.8
	PO 1573.0	PO 1570.3	PO 1569.0	PO 1566.3	PO 1563.6	PO 1562.2	PO 1560.9
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	0.089	-0.010	-0.087	-0.166	-0.269	-0.365	-0.431
2 .008 U	-1.656	-1.633	-1.732	-1.727	-1.693	-1.767	-1.614
3 .017 U	-1.725	-1.582	-1.633	-1.774	-1.808	-1.892	-1.598
4 .040 U	-1.218	-1.269	-1.090	-0.935	-1.446	-1.552	-1.408
5 .065 U	-1.082	-1.155	-1.024	-0.880	-1.426	-1.543	-1.364
6 .090 U	-1.046	-1.121	-1.003	-0.875	-1.434	-1.551	-1.343
7 .130 U	-1.059	-1.054	-0.972	-0.881	-1.242	-1.426	-1.331
8 .168 U	-0.968	-1.050	-0.962	-0.853	-1.416	-1.426	-1.195
9 .233 U	-0.921	-1.003	-0.918	-0.861	-1.313	-1.272	-1.124
10 .335 U	-0.870	-0.913	-0.857	-0.818	-1.016	-1.022	-0.970
11 .500 U	-0.811	-0.818	-0.807	-0.811	-0.833	-0.871	-0.893
12 .625 U	-0.770	-0.783	-0.810	-0.834	-0.846	-0.883	-0.909
13 .769 U	-0.705	-0.723	-0.794	-0.844	-0.856	-0.894	-0.924
14 .915 U	-0.600	-0.636	-0.729	-0.807	-0.834	-0.879	-0.909
15 .960 U	-0.556	-0.597	-0.684	-0.766	-0.806	-0.863	-0.889
16 .008 L	0.930	0.933	0.929	0.929	0.927	0.933	0.947
17 .017 L	0.984	0.970	0.957	0.950	0.935	0.934	0.932
18 .040 L	0.770	0.810	0.837	0.864	0.909	0.923	0.943
19 .065 L	0.588	0.627	0.657	0.691	0.742	0.759	0.786
20 .090 L	0.469	0.509	0.534	0.568	0.622	0.637	0.664
21 .130 L	0.320	0.357	0.391	0.425	0.471	0.498	0.526
22 .168 L	0.252	0.278	0.304	0.331	0.380	0.409	0.436
23 .233 L	0.109	0.137	0.167	0.195	0.238	0.261	0.277
24 .335 L	0.023	0.039	0.064	0.080	0.115	0.130	0.150
25 .500 L	-0.059	-0.047	-0.043	-0.021	0.003	0.007	0.017
26 .625 L	-0.113	-0.109	-0.111	-0.110	-0.095	-0.099	-0.098
27 .769 L	-0.128	-0.139	-0.156	-0.162	-0.154	-0.168	-0.172
28 .915 L	-0.133	-0.153	-0.183	-0.204	-0.205	-0.223	-0.239
29 .960 L	-0.007	-0.015	-0.045	-0.068	-0.058	-0.084	-0.093

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 8 150	RUN 8 151	RUN 8 152	RUN 9 153	RUN 9 154	RUN 9 155	RUN 9 156
MU	0.65	0.65	0.65	0.70	0.70	0.70	0.70
AU	19.0	20.0	0.	0.	-1.0	-2.0	-3.0
M	0.676	0.677	0.653	0.704	0.704	0.704	0.705
A	19.04	20.03	0.	0.	-1.01	-2.03	-3.04
QO	498.9	499.9	474.7	527.8	527.8	527.8	528.9
PO	1559.5	1558.2	1590.5	1521.5	1521.5	1521.5	1520.1
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	-0.803	-0.614	1.038	1.111	1.103	1.049	0.966
2 .008 U	-1.794	-1.754	0.360	0.363	0.564	0.734	0.846
3 .017 U	-1.735	-1.738	0.006	-0.015	0.217	0.418	0.565
4 .040 U	-1.492	-1.449	-0.381	-0.454	-0.213	0.000	0.152
5 .065 U	-1.468	-1.450	-0.448	-0.553	-0.334	-0.153	-0.006
6 .090 U	-1.461	-1.451	-0.519	-0.651	-0.436	-0.260	-0.120
7 .130 U	-1.491	-1.361	-0.672	-0.707	-0.542	-0.402	-0.257
8 .168 U	-1.409	-1.404	-0.481	-0.636	-0.477	-0.338	-0.239
9 .233 U	-1.392	-1.324	-0.460	-0.626	-0.488	-0.374	-0.288
10 .335 U	-1.280	-1.207	-0.337	-0.457	-0.388	-0.315	-0.258
11 .500 U	-1.232	-1.110	-0.227	-0.316	-0.279	-0.235	-0.198
12 .625 U	-1.249	-1.110	-0.155	-0.233	-0.207	-0.181	-0.152
13 .769 U	-1.259	-1.115	-0.021	-0.080	-0.069	-0.050	-0.046
14 .915 U	-1.249	-1.115	0.137	0.096	0.099	0.104	0.102
15 .960 U	-1.238	-1.110	0.232	0.200	0.208	0.216	0.217
16 .008 L	0.742	0.974	0.359	0.349	0.101	-0.149	-0.391
17 .017 L	0.774	0.937	-0.009	-0.053	-0.322	-0.586	-0.818
18 .040 L	0.642	0.970	-0.278	-0.345	-0.598	-0.821	-1.023
19 .065 L	0.484	0.808	-0.418	-0.526	-0.798	-1.078	-1.276
20 .090 L	0.370	0.694	-0.458	-0.586	-0.834	-1.115	-1.295
21 .130 L	0.217	0.535	-0.501	-0.663	-0.950	-1.156	-1.388
22 .168 L	0.134	0.442	-0.448	-0.593	-0.775	-1.139	-1.382
23 .233 L	-0.022	0.270	-0.458	-0.609	-0.748	-0.937	-1.423
24 .335 L	-0.153	0.126	-0.346	-0.460	-0.540	-0.581	-0.602
25 .500 L	-0.292	-0.028	-0.223	-0.317	-0.369	-0.407	-0.404
26 .625 L	-0.418	-0.166	-0.125	-0.208	-0.242	-0.262	-0.275
27 .769 L	-0.500	-0.265	-0.004	-0.067	-0.085	-0.096	-0.109
28 .915 L	-0.572	-0.353	0.148	0.118	0.107	0.096	0.082
29 .960 L	-0.423	-0.195	0.264	0.223	0.206	0.198	0.193

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

		RUN 9 157	RUN 9 158	RUN 9 160	RUN 9 161	RUN 9 162	RUN 9 163	RUN 9 164
	MU	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	AU	-4.0	0.	2.0	3.0	4.0	5.0	6.0
	M	0.706	0.704	0.704	0.705	0.706	0.708	0.709
	A	-4.05	0.	2.03	3.04	4.05	5.05	6.06
	Q0	529.9	527.8	527.8	528.9	529.9	531.9	533.0
	P0	1518.7	1521.5	1521.5	1520.1	1518.7	1516.0	1514.6
TAP	X/C	CP	CP	CP	CP	CP	CP	CP
1	.000	0.878	1.102	1.061	0.980	0.894	0.811	0.760
2	.008 U	0.924	0.104	-0.151	-0.375	-0.529	-0.661	-0.832
3	.017 U	0.661	-0.285	-0.540	-0.755	-0.916	-1.064	-1.155
4	.040 U	0.259	-0.730	-0.979	-1.151	-1.285	-1.390	-1.445
5	.065 U	0.096	-0.826	-1.124	-1.320	-1.433	-1.541	-1.613
6	.090 U	-0.022	-0.889	-1.145	-1.328	-1.459	-1.563	-1.599
7	.130 U	-0.168	-0.963	-1.137	-1.341	-1.487	-1.580	-1.618
8	.168 U	-0.156	-0.849	-1.201	-1.400	-1.535	-1.602	-1.650
9	.233 U	-0.212	-0.757	-1.226	-1.443	-1.573	-1.616	-1.642
10	.335 U	-0.201	-0.544	-0.543	-0.680	-1.078	-0.992	-1.012
11	.500 U	-0.174	-0.370	-0.391	-0.391	-0.335	-0.467	-0.623
12	.625 U	-0.137	-0.266	-0.284	-0.292	-0.278	-0.246	-0.260
13	.769 U	-0.039	-0.106	-0.121	-0.123	-0.130	-0.125	-0.113
14	.915 U	0.105	0.081	0.080	0.069	0.053	0.025	0.012
15	.960 U	0.215	0.184	0.180	0.174	0.146	0.096	0.079
16	.008 L	-0.548	0.550	0.727	0.843	0.932	0.988	0.966
17	.017 L	-0.965	0.186	0.388	0.532	0.653	0.727	0.811
18	.040 L	-1.152	-0.125	0.065	0.207	0.332	0.410	0.505
19	.065 L	-1.388	-0.314	-0.128	0.025	0.133	0.213	0.298
20	.090 L	-1.437	-0.386	-0.217	-0.074	0.033	0.107	0.188
21	.130 L	-1.491	-0.473	-0.316	-0.186	-0.093	-0.018	0.058
22	.168 L	-1.505	-0.440	-0.313	-0.205	-0.120	-0.058	0.013
23	.233 L	-1.534	-0.481	-0.372	-0.281	-0.204	-0.151	-0.095
24	.335 L	-1.002	-0.381	-0.311	-0.248	-0.195	-0.164	-0.119
25	.500 L	-0.352	-0.265	-0.213	-0.187	-0.152	-0.139	-0.113
26	.625 L	-0.264	-0.181	-0.152	-0.125	-0.109	-0.104	-0.094
27	.769 L	-0.111	-0.050	-0.035	-0.023	-0.016	-0.022	-0.023
28	.915 L	0.069	0.111	0.114	0.126	0.129	0.111	0.103
29	.960 L	0.165	0.229	0.235	0.237	0.240	0.229	0.227

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN	9 165	RUN	9 166	RUN	9 167	RUN	9 168	RUN	9 169	RUN	9 170	RUN	9 171
	MU	0.70	MU	0.70	MU	0.70	MU	0.70	MU	0.70	MU	0.70	MU	0.70
	AU	7.0	AU	8.0	AU	9.0	AU	10.0	AU	11.0	AU	12.0	AU	13.0
	M	0.711	M	0.713	M	0.715	M	0.717	M	0.719	M	0.721	M	0.724
	A	7.06	A	8.06	A	9.05	A	10.05	A	11.05	A	12.04	A	13.04
	QO	535.0	QO	537.1	QO	539.1	QO	541.1	QO	543.2	QO	545.2	QO	548.2
	PO	1511.9	PO	1509.2	PO	1506.4	PO	1503.7	PO	1501.0	PO	1498.2	PO	1494.1

TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		0.652	0.585	0.509	0.438	0.371	0.311	0.253
2	.008	U	-0.980	-1.086	-1.191	-1.292	-1.383	-1.437	-1.503
3	.017	U	-1.292	-1.379	-1.441	-1.490	-1.513	-1.538	-1.583
4	.040	U	-1.558	-1.628	-1.645	-1.583	-1.454	-1.228	-1.161
5	.065	U	-1.697	-1.726	-1.640	-1.471	-1.371	-1.045	-0.872
6	.090	U	-1.669	-1.717	-1.573	-1.391	-1.300	-1.002	-0.849
7	.130	U	-1.689	-1.703	-1.536	-1.339	-1.235	-1.036	-0.882
8	.168	U	-1.726	-1.578	-1.294	-1.156	-1.086	-0.898	-0.810
9	.233	U	-1.679	-1.271	-1.090	-1.016	-0.965	-0.856	-0.806
10	.335	U	-1.123	-1.023	-0.934	-0.894	-0.867	-0.828	-0.803
11	.500	U	-0.646	-0.759	-0.781	-0.812	-0.820	-0.821	-0.817
12	.625	U	-0.357	-0.554	-0.660	-0.761	-0.793	-0.823	-0.838
13	.769	U	-0.188	-0.375	-0.537	-0.677	-0.742	-0.808	-0.849
14	.915	U	-0.066	-0.246	-0.416	-0.565	-0.648	-0.738	-0.806
15	.960	U	-0.016	-0.208	-0.368	-0.511	-0.601	-0.693	-0.780
16	.008	L	0.960	0.954	0.944	0.933	0.924	0.923	0.920
17	.017	L	0.846	0.879	0.922	0.952	0.985	0.990	0.983
18	.040	L	0.538	0.572	0.632	0.674	0.710	0.746	0.771
19	.065	L	0.342	0.379	0.438	0.481	0.522	0.552	0.576
20	.090	L	0.230	0.261	0.324	0.363	0.398	0.430	0.456
21	.130	L	0.093	0.125	0.182	0.218	0.256	0.287	0.311
22	.168	L	0.045	0.073	0.120	0.146	0.184	0.218	0.243
23	.233	L	-0.067	-0.055	-0.009	0.016	0.047	0.073	0.086
24	.335	L	-0.108	-0.102	-0.074	-0.062	-0.044	-0.024	-0.012
25	.500	L	-0.117	-0.131	-0.119	-0.119	-0.110	-0.109	-0.102
26	.625	L	-0.108	-0.134	-0.136	-0.153	-0.150	-0.158	-0.180
27	.769	L	-0.049	-0.094	-0.115	-0.149	-0.168	-0.188	-0.212
28	.915	L	0.059	-0.006	-0.053	-0.106	-0.145	-0.174	-0.206
29	.960	L	0.187	0.117	0.073	0.021	-0.005	-0.032	-0.054

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

		RUN 9 172	RUN 9 173	RUN 9 174	RUN 9 175	RUN 18 227	RUN 18 228	RUN 18 229
	MU	0.70	0.70	0.70	0.70	0.75	0.75	0.75
	AU	14.0	15.0	16.0	0.	0.	-1.0	-2.0
	M	0.725	0.727	0.729	0.704	0.755	0.756	0.757
	A	14.04	15.04	16.04	0.	0.	-1.02	-2.03
	QO	549.2	551.3	553.3	527.8	581.1	582.1	583.1
	PO	1492.7	1490.0	1487.3	1521.5	1456.3	1454.9	1453.5
TAP	X/C	CP	CP	CP	CP	CP	CP	CP
1	.000	0.185	0.100	0.005	1.104	1.131	1.127	1.097
2	.008 U	-1.487	-1.485	-1.585	0.345	0.430	0.607	0.727
3	.017 U	-1.173	-1.436	-1.729	-0.031	0.066	0.264	0.406
4	.040 U	-0.862	-0.998	-1.284	-0.478	-0.366	-0.152	0.001
5	.065 U	-0.818	-0.965	-1.277	-0.572	-0.511	-0.310	-0.169
6	.090 U	-0.811	-0.950	-1.255	-0.667	-0.613	-0.419	-0.281
7	.130 U	-0.823	-0.929	-1.200	-0.862	-0.742	-0.605	-0.448
8	.168 U	-0.790	-0.930	-1.174	-0.657	-0.783	-0.520	-0.400
9	.233 U	-0.789	-0.923	-1.071	-0.627	-0.793	-0.570	-0.452
10	.335 U	-0.800	-0.906	-1.027	-0.471	-0.496	-0.431	-0.369
11	.500 U	-0.827	-0.908	-0.969	-0.342	-0.332	-0.299	-0.275
12	.625 U	-0.856	-0.924	-0.982	-0.255	-0.235	-0.214	-0.203
13	.769 U	-0.881	-0.947	-0.996	-0.092	-0.079	-0.062	-0.064
14	.915 U	-0.862	-0.931	-0.984	0.075	0.104	0.114	0.113
15	.960 U	-0.833	-0.900	-0.964	0.193	0.212	0.223	0.220
16	.008 L	0.917	0.914	0.918	0.348	0.371	0.177	0.016
17	.017 L	0.967	0.945	0.936	-0.039	-0.017	-0.221	-0.395
18	.040 L	0.803	0.855	0.881	-0.345	-0.335	-0.513	-0.656
19	.065 L	0.620	0.677	0.703	-0.524	-0.547	-0.768	-0.893
20	.090 L	0.493	0.552	0.584	-0.585	-0.629	-0.810	-0.961
21	.130 L	0.350	0.401	0.437	-0.662	-0.790	-0.918	-1.055
22	.168 L	0.271	0.313	0.349	-0.595	-0.814	-0.945	-1.078
23	.233 L	0.113	0.160	0.193	-0.608	-0.812	-1.047	-1.172
24	.335 L	0.013	0.044	0.058	-0.466	-0.486	-1.039	-1.185
25	.500 L	-0.091	-0.067	-0.054	-0.320	-0.343	-0.314	-0.498
26	.625 L	-0.171	-0.163	-0.151	-0.204	-0.222	-0.213	-0.181
27	.769 L	-0.220	-0.220	-0.215	-0.061	-0.066	-0.063	-0.060
28	.915 L	-0.220	-0.224	-0.222	0.112	0.124	0.127	0.111
29	.960 L	-0.069	-0.065	-0.066	0.219	0.224	0.230	0.212

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 18 230	RUN 18 231	RUN 18 232	RUN 18 233	RUN 18 234	RUN 18 235	RUN 18 236
MU	0.75	0.75	0.75	0.75	0.75	0.75	0.75
AU	-3.0	-4.0	0.	1.0	2.0	3.0	4.0
M	0.758	0.760	0.755	0.756	0.757	0.758	0.760
A	-3.04	-4.04	0.	1.02	2.03	3.03	4.04
QO	584.1	586.0	581.1	582.1	583.1	584.1	586.0
PO	1452.2	1449.4	1456.3	1454.9	1453.5	1452.2	1449.4
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	1.045	1.001	1.131	1.133	1.117	1.076	1.029
2 .008 U	0.819	0.890	0.432	0.259	0.074	-0.067	-0.188
3 .017 U	0.518	0.605	0.063	-0.101	-0.291	-0.432	-0.551
4 .040 U	0.128	0.215	-0.368	-0.540	-0.708	-0.823	-0.919
5 .065 U	-0.048	0.035	-0.521	-0.691	-0.877	-1.007	-1.111
6 .090 U	-0.170	-0.088	-0.614	-0.713	-0.908	-1.028	-1.134
7 .130 U	-0.321	-0.217	-0.728	-0.782	-0.902	-1.019	-1.148
8 .168 U	-0.302	-0.231	-0.790	-0.889	-1.033	-1.136	-1.239
9 .233 U	-0.377	-0.314	-0.800	-1.004	-1.136	-1.225	-1.319
10 .335 U	-0.328	-0.297	-0.508	-0.905	-1.152	-1.258	-1.327
11 .500 U	-0.251	-0.243	-0.337	-0.317	-0.391	-0.581	-0.692
12 .625 U	-0.193	-0.203	-0.252	-0.233	-0.203	-0.220	-0.547
13 .769 U	-0.074	-0.093	-0.093	-0.084	-0.062	-0.073	-0.182
14 .915 U	0.101	0.081	0.094	0.104	0.102	0.082	0.028
15 .960 U	0.211	0.193	0.209	0.219	0.205	0.172	0.081
16 .008 L	-0.121	-0.250	0.367	0.542	0.679	0.783	0.856
17 .017 L	-0.547	-0.655	-0.037	0.149	0.326	0.458	0.557
18 .040 L	-0.776	-0.856	-0.341	-0.163	0.011	0.138	0.228
19 .065 L	-1.027	-1.097	-0.554	-0.354	-0.188	-0.057	0.033
20 .090 L	-1.060	-1.157	-0.633	-0.449	-0.288	-0.168	-0.080
21 .130 L	-1.165	-1.236	-0.795	-0.609	-0.421	-0.298	-0.210
22 .168 L	-1.177	-1.259	-0.813	-0.562	-0.399	-0.294	-0.225
23 .233 L	-1.258	-1.340	-0.809	-0.637	-0.481	-0.387	-0.325
24 .335 L	-1.285	-1.281	-0.475	-0.436	-0.377	-0.330	-0.295
25 .500 L	-0.673	-0.699	-0.343	-0.296	-0.265	-0.244	-0.241
26 .625 L	-0.331	-0.607	-0.225	-0.197	-0.176	-0.167	-0.174
27 .769 L	-0.056	-0.242	-0.075	-0.061	-0.046	-0.046	-0.064
28 .915 L	0.088	-0.002	0.113	0.126	0.126	0.132	0.106
29 .960 L	0.159	0.056	0.224	0.238	0.238	0.240	0.225

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 18 237	RUN 18 238	RUN 18 239	RUN 18 240	RUN 18 241	RUN 18 242	RUN 18 243
MU	0.75	0.75	0.75	0.75	0.75	0.75	0.75
AU	5.0	6.0	7.0	8.0	9.0	10.0	0.
M	0.762	0.764	0.767	0.769	0.773	0.778	0.755
A	5.04	6.04	7.04	8.04	9.04	10.04	0.
QO	588.0	589.9	592.9	594.8	598.7	603.6	581.1
PO	1446.6	1443.9	1439.7	1437.0	1431.4	1424.5	1456.3
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	0.977	0.923	0.867	0.805	0.756	0.717	1.129
2 .008 U	-0.304	-0.389	-0.485	-0.646	-0.736	-0.814	0.432
3 .017 U	-0.664	-0.753	-0.834	-0.928	-0.994	-1.032	0.065
4 .040 U	-1.014	-1.082	-1.130	-1.201	-1.251	-1.284	-0.393
5 .065 U	-1.180	-1.241	-1.297	-1.367	-1.400	-1.421	-0.512
6 .090 U	-1.215	-1.273	-1.318	-1.385	-1.403	-1.408	-0.614
7 .130 U	-1.248	-1.298	-1.332	-1.385	-1.410	-1.428	-0.863
8 .168 U	-1.315	-1.351	-1.350	-1.391	-1.440	-1.468	-0.777
9 .233 U	-1.373	-1.167	-0.982	-1.055	-1.179	-1.472	-0.790
10 .335 U	-1.027	-0.852	-0.829	-0.865	-0.920	-1.101	-0.500
11 .500 U	-0.735	-0.759	-0.768	-0.806	-0.849	-0.914	-0.350
12 .625 U	-0.682	-0.727	-0.755	-0.793	-0.849	-0.921	-0.250
13 .769 U	-0.380	-0.535	-0.626	-0.710	-0.813	-0.931	-0.093
14 .915 U	-0.100	-0.275	-0.401	-0.522	-0.667	-0.869	0.099
15 .960 U	-0.031	-0.201	-0.329	-0.440	-0.596	-0.816	0.209
16. .008 L	0.920	0.967	0.995	0.963	0.951	0.939	0.370
17 .017 L	0.633	0.696	0.750	0.818	0.852	0.889	-0.025
18 .040 L	0.313	0.386	0.443	0.508	0.553	0.590	-0.343
19 .065 L	0.113	0.189	0.236	0.311	0.345	0.382	-0.550
20 .090 L	0.004	0.073	0.117	0.188	0.226	0.261	-0.629
21 .130 L	-0.133	-0.070	-0.028	0.039	0.079	0.106	-0.790
22 .168 L	-0.162	-0.106	-0.071	-0.014	0.020	0.044	-0.818
23 .233 L	-0.271	-0.225	-0.195	-0.142	-0.120	-0.099	-0.825
24 .335 L	-0.268	-0.244	-0.224	-0.198	-0.191	-0.182	-0.490
25 .500 L	-0.248	-0.253	-0.262	-0.264	-0.277	-0.288	-0.341
26 .625 L	-0.182	-0.198	-0.217	-0.232	-0.258	-0.287	-0.216
27 .769 L	-0.083	-0.125	-0.156	-0.188	-0.236	-0.282	-0.072
28 .915 L	0.076	0.017	-0.037	-0.080	-0.127	-0.171	0.122
29 .960 L	0.193	0.135	0.081	0.050	0.007	-0.025	0.227

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

		RUN 19 245	RUN 19 246	RUN 19 247	RUN 19 248	RUN 19 249	RUN 19 250	RUN 19 251
MU		0.80	0.80	0.80	0.80	0.80	0.80	0.80
AU		0.	-1.0	-2.0	-3.0	-4.0	0.	1.0
M		0.810	0.811	0.813	0.816	0.818	0.810	0.811
A		0.	-1.00	-2.01	-3.01	-4.02	0.	1.00
QO		633.9	634.8	636.7	639.4	641.3	633.9	634.8
PO		1380.2	1378.8	1376.1	1371.9	1369.1	1380.2	1378.8
TAP	X/C	CP	CP	CP	CP	CP	CP	CP
1	.000	1.152	1.148	1.132	1.127	1.098	1.154	1.151
2	.008 U	0.499	0.593	0.671	0.749	0.813	0.497	0.383
3	.017 U	0.153	0.257	0.345	0.436	0.506	0.149	0.029
4	.040 U	-0.292	-0.163	-0.090	0.010	0.087	-0.292	-0.411
5	.065 U	-0.421	-0.315	-0.234	-0.137	-0.070	-0.422	-0.556
6	.090 U	-0.504	-0.421	-0.354	-0.263	-0.197	-0.506	-0.569
7	.130 U	-0.557	-0.589	-0.561	-0.464	-0.402	-0.585	-0.684
8	.168 U	-0.693	-0.630	-0.513	-0.419	-0.368	-0.691	-0.771
9	.233 U	-0.809	-0.696	-0.637	-0.577	-0.526	-0.811	-0.881
10	.335 U	-0.868	-0.784	-0.726	-0.647	-0.597	-0.866	-0.944
11	.500 U	-0.908	-0.700	-0.685	-0.568	-0.635	-0.902	-1.002
12	.625 U	-0.209	-0.171	-0.206	-0.250	-0.324	-0.275	-0.403
13	.769 U	-0.017	-0.060	-0.108	-0.163	-0.212	-0.027	-0.273
14	.915 U	0.151	0.105	0.035	-0.019	-0.066	0.134	0.031
15	.960 U	0.247	0.207	0.131	0.078	0.044	0.239	0.106
16	.008 L	0.442	0.343	0.254	0.164	0.091	0.438	0.541
17	.017 L	0.073	-0.038	-0.128	-0.235	-0.307	0.058	0.173
18	.040 L	-0.233	-0.328	-0.401	-0.473	-0.539	-0.239	-0.128
19	.065 L	-0.453	-0.572	-0.640	-0.701	-0.764	-0.456	-0.342
20	.090 L	-0.520	-0.625	-0.708	-0.772	-0.821	-0.525	-0.429
21	.130 L	-0.661	-0.744	-0.804	-0.875	-0.926	-0.676	-0.606
22	.168 L	-0.715	-0.782	-0.844	-0.904	-0.952	-0.719	-0.641
23	.233 L	-0.826	-0.895	-0.942	-0.997	-1.037	-0.840	-0.723
24	.335 L	-0.864	-0.946	-0.989	-1.044	-1.081	-0.875	-0.777
25	.500 L	-0.946	-1.000	-0.773	-0.598	-0.640	-0.935	-0.717
26	.625 L	-0.314	-0.443	-0.455	-0.489	-0.531	-0.297	-0.158
27	.769 L	0.004	-0.322	-0.396	-0.453	-0.511	-0.009	-0.026
28	.915 L	0.155	-0.084	-0.264	-0.373	-0.452	0.149	0.148
29	.960 L	0.246	0.000	-0.196	-0.309	-0.402	0.248	0.255

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

		RUN 19 252	RUN 19 253	RUN 19 254	RUN 19 255	RUN 19 256	RUN 19 257	RUN 19 258
	MU	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	AU	2.0	3.0	4.0	5.0	0.	1.0	2.0
	M	0.813	0.815	0.818	0.821	0.810	0.811	0.813
	A	2.01	3.01	4.02	5.02	0.	1.00	2.01
	QO	636.7	638.5	641.3	644.0	633.9	634.8	636.7
	PO	1376.1	1373.3	1369.1	1365.0	1380.2	1378.8	1376.1
TAP	X/C	CP	CP	CP	CP	CP	CP	CP
1	.000	1.144	1.136	1.121	1.090	1.156	1.153	1.148
2	.008 U	0.296	0.205	0.115	0.033	0.491	0.389	0.305
3	.017 U	-0.055	-0.144	-0.230	-0.302	0.142	0.037	-0.043
4	.040 U	-0.497	-0.565	-0.614	-0.663	-0.276	-0.379	-0.454
5	.065 U	-0.642	-0.710	-0.786	-0.847	-0.427	-0.546	-0.630
6	.090 U	-0.669	-0.752	-0.820	-0.883	-0.516	-0.563	-0.653
7	.130 U	-0.723	-0.789	-0.865	-0.930	-0.753	-0.692	-0.725
8	.168 U	-0.825	-0.888	-0.947	-0.999	-0.708	0.154	-0.810
9	.233 U	-0.932	-0.983	-1.038	-1.083	-0.813	-0.877	-0.921
10	.335 U	-0.987	-1.035	-1.084	-1.118	-0.880	-0.940	-0.978
11	.500 U	-0.831	-0.613	-0.544	-0.695	-0.980	-1.008	-0.872
12	.625 U	-0.438	-0.459	-0.495	-0.549	-0.312	-0.404	-0.435
13	.769 U	-0.398	-0.461	-0.511	-0.571	-0.022	-0.280	-0.382
14	.915 U	-0.216	-0.371	-0.475	-0.563	0.139	0.031	-0.204
15	.960 U	-0.139	-0.296	-0.410	-0.512	0.236	0.105	-0.123
16	.008 L	0.629	0.709	0.781	0.844	0.452	0.548	0.626
17	.017 L	0.272	0.369	0.457	0.534	0.088	0.193	0.277
18	.040 L	-0.036	0.057	0.145	0.217	-0.224	-0.124	-0.049
19	.065 L	-0.245	-0.150	-0.068	0.009	-0.441	-0.337	-0.250
20	.090 L	-0.344	-0.260	-0.173	-0.105	-0.516	-0.425	-0.348
21	.130 L	-0.538	-0.435	-0.339	-0.267	-0.654	-0.595	-0.544
22	.168 L	-0.495	-0.406	-0.342	-0.282	-0.705	-0.638	-0.507
23	.233 L	-0.654	-0.590	-0.528	-0.465	-0.819	-0.713	-0.656
24	.335 L	-0.714	-0.610	-0.464	-0.375	-0.855	-0.769	-0.719
25	.500 L	-0.644	-0.669	-0.709	-0.710	-0.935	-0.748	-0.701
26	.625 L	-0.173	-0.213	-0.330	-0.643	-0.336	-0.149	-0.171
27	.769 L	-0.071	-0.118	-0.166	-0.219	-0.013	-0.019	-0.064
28	.915 L	0.084	0.016	-0.041	-0.081	0.151	0.155	0.086
29	.960 L	0.179	0.111	0.065	0.019	0.245	0.256	0.173

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS

	RUN 19 259	RUN 19 260	RUN 19 261	RUN 19 262
	MU 0.80	MU 0.80	MU 0.80	MU 0.80
	AU 3.0	AU 4.0	AU 5.0	AU 0.
	M 0.816	M 0.818	M 0.822	M 0.810
	A 3.01	A 4.02	A 5.02	A 0.
	QO 639.4	QO 641.3	QO 645.0	QO 633.9
	PO 1371.9	PO 1369.1	PO 1363.6	PO 1380.2
TAP X/C	CP	CP	CP	CP
1 .000	1.140	1.120	1.095	1.151
2 .008 U	0.204	0.118	0.051	0.501
3 .017 U	-0.140	-0.226	-0.287	0.153
4 .040 U	-0.535	-0.606	-0.645	-0.260
5 .065 U	-0.710	-0.786	-0.834	-0.418
6 .090 U	-0.756	-0.820	-0.869	-0.501
7 .130 U	-0.800	-0.866	-0.905	-0.710
8 .168 U	-0.886	-0.946	-0.985	-0.694
9 .233 U	-0.985	-1.042	-1.072	-0.808
10 .335 U	-1.039	-1.086	-1.103	-0.868
11 .500 U	-0.615	-0.589	-0.799	-0.921
12 .625 U	-0.467	-0.502	-0.564	-0.269
13 .769 U	-0.466	-0.512	-0.559	-0.022
14 .915 U	-0.380	-0.471	-0.553	0.132
15 .960 U	-0.301	-0.405	-0.503	0.235
16 .008 L	0.709	0.778	0.832	0.439
17 .017 L	0.387	0.463	0.530	0.057
18 .040 L	0.061	0.142	0.213	-0.240
19 .065 L	-0.146	-0.068	0.001	-0.456
20 .090 L	-0.254	-0.180	-0.112	-0.525
21 .130 L	-0.429	-0.340	-0.274	-0.666
22 .168 L	-0.399	-0.345	-0.287	-0.720
23 .233 L	-0.583	-0.529	-0.471	-0.827
24 .335 L	-0.601	-0.466	-0.393	-0.867
25 .500 L	-0.679	-0.716	-0.704	-0.940
26 .625 L	-0.224	-0.318	-0.640	-0.345
27 .769 L	-0.118	-0.164	-0.271	-0.014
28 .915 L	0.020	-0.038	-0.075	0.147
29 .960 L	0.114	0.068	0.010	0.236

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

	RUN 30 365	RUN 30 366	RUN 30 367	RUN 30 368	RUN 30 369	RUN 30 370	RUN 30 371
	MU 0.30	MU 0.30	MU 0.30	MU 0.30	MU 0.30	MU 0.30	MU 0.30
	AU 0.	AU -2.0	AU 0.	AU 2.0	AU 4.0	AU 6.0	AU 8.0
	M 0.301	M 0.301	M 0.301	M 0.301	M 0.301	M 0.301	M 0.301
	A 0.	A -2.01	A 0.	A 2.01	A 4.03	A 6.04	A 8.05
	QO 126.5	QO 126.5	QO 126.5	QO 126.5	QO 126.5	QO 126.5	QO 126.5
	PO 1994.6	PO 1994.6	PO 1994.6	PO 1994.6	PO 1994.6	PO 1994.6	PO 1994.6
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	0.959	0.799	0.948	0.905	0.570	-0.234	-1.313
2 .008 U	0.207	0.638	0.292	-0.311	-1.136	-2.214	-3.480
3 .017 U	-0.089	0.391	-0.040	-0.608	-1.287	-2.167	-3.123
4 .040 U	-0.474	-0.089	-0.400	-0.851	-1.330	-1.938	-2.548
5 .065 U	-0.495	-0.192	-0.418	-0.770	-1.153	-1.525	-1.981
6 .090 U	-0.517	-0.263	-0.463	-0.720	-1.033	-1.363	-1.734
7 .130 U	-0.584	-0.337	-0.439	-0.636	-0.892	-1.123	-1.416
8 .168 U	-0.474	-0.326	-0.439	-0.614	-0.782	-1.013	-1.226
9 .233 U	-0.495	-0.337	-0.414	-0.575	-0.711	-0.861	-1.014
10 .335 U	-0.375	-0.284	-0.368	-0.431	-0.549	-0.646	-0.774
11 .500 U	-0.344	-0.270	-0.266	-0.332	-0.369	-0.462	-0.506
12 .625 U	-0.266	-0.228	-0.167	-0.244	-0.274	-0.300	-0.369
13 .769 U	-0.097	-0.094	-0.054	-0.110	-0.129	-0.160	-0.169
14 .915 U	-0.019	-0.026	0.010	-0.007	-0.013	-0.009	-0.001
15 .960 U	0.105	0.115	0.140	0.123	0.124	0.086	0.076
16 .008 L	-0.036	-0.664	-0.047	0.423	0.779	0.882	0.913
17 .017 L	-0.393	-0.946	-0.389	0.066	0.518	0.758	0.899
18 .040 L	-0.548	-0.932	-0.587	-0.188	0.165	0.440	0.659
19 .065 L	-0.668	-0.935	-0.696	-0.375	-0.019	0.225	0.419
20 .090 L	-0.640	-0.875	-0.661	-0.375	-0.082	0.140	0.303
21 .130 L	-0.636	-0.829	-0.647	-0.421	-0.153	0.006	0.189
22 .168 L	-0.573	-0.712	-0.594	-0.421	-0.210	-0.012	0.154
23 .233 L	-0.558	-0.659	-0.583	-0.425	-0.266	-0.079	0.065
24 .335 L	-0.435	-0.532	-0.452	-0.337	-0.185	-0.069	0.012
25 .500 L	-0.332	-0.416	-0.375	-0.280	-0.182	-0.108	-0.027
26 .625 L	-0.301	-0.317	-0.325	-0.255	-0.185	-0.136	-0.069
27 .769 L	-0.131	-0.208	-0.181	-0.142	-0.072	-0.048	-0.002
28 .915 L	-0.043	-0.056	-0.068	-0.065	-0.012	0.006	0.031
29 .960 L	0.020	-0.000	-0.001	-0.001	0.024	0.066	0.081

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 5° TAB DEFLECTION

	RUN 30 372	RUN 30 373	RUN 30 374	RUN 30 375	RUN 30 376	RUN 29 352	RUN 29 353
MU	0.30	0.30	0.30	0.30	0.30	0.40	0.40
AU	10.0	12.0	14.0	16.0	0.	0.	-2.0
M	0.301	0.301	0.302	0.303	0.301	0.401	0.401
A	10.06	12.07	14.07	16.05	0.	0.	-2.02
QO	126.5	126.5	127.3	128.1	126.5	214.0	214.0
PO	1994.6	1994.6	1993.8	1993.0	1994.6	1901.3	1901.3
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	-2.600	-3.906	-4.832	-2.674	0.930	1.009	0.830
2 .008 U	-4.798	-6.120	-7.155	-3.682	0.190	0.331	0.703
3 .017 U	-4.231	-5.599	-6.411	-2.855	-0.089	-0.009	0.414
4 .040 U	-3.192	-3.728	-4.042	-1.701	-0.478	-0.353	0.005
5 .065 U	-2.389	-2.751	-2.976	-1.042	-0.502	-0.405	-0.118
6 .090 U	-2.061	-2.336	-2.475	-0.802	-0.534	-0.440	-0.213
7 .130 U	-1.610	-1.850	-1.956	-1.058	-0.605	-0.465	-0.309
8 .168 U	-1.423	-1.562	-1.669	-0.708	-0.524	-0.434	-0.264
9 .233 U	-1.159	-1.270	-1.304	-0.731	-0.524	-0.411	-0.293
10 .335 U	-0.863	-0.911	-0.950	-0.745	-0.390	-0.328	-0.233
11 .500 U	-0.567	-0.581	-0.582	-0.759	-0.347	-0.247	-0.206
12 .625 U	-0.363	-0.402	-0.390	-0.759	-0.273	-0.157	-0.166
13 .769 U	-0.167	-0.174	-0.219	-0.725	-0.111	-0.074	-0.047
14 .915 U	0.001	-0.035	-0.035	-0.598	-0.022	0.089	0.090
15 .960 U	0.057	0.034	-0.015	-0.547	0.119	0.214	0.212
16 .008 L	0.829	0.569	0.364	0.651	0.066	0.085	-0.656
17 .017 L	0.928	0.928	0.914	0.922	-0.397	-0.278	-0.947
18 .040 L	0.779	0.868	0.886	0.915	-0.485	-0.463	-0.926
19 .065 L	0.624	0.716	0.833	0.776	-0.576	-0.540	-0.947
20 .090 L	0.472	0.571	0.654	0.647	-0.569	-0.552	-0.870
21 .130 L	0.348	0.441	0.523	0.511	-0.555	-0.561	-0.826
22 .168 L	0.299	0.381	0.421	0.413	-0.520	-0.513	-0.717
23 .233 L	0.193	0.243	0.323	0.288	-0.513	-0.496	-0.680
24 .335 L	0.129	0.183	0.213	0.176	-0.438	-0.413	-0.532
25 .500 L	0.058	0.112	0.104	0.040	-0.336	-0.315	-0.394
26 .625 L	-0.013	-0.025	0.013	-0.015	-0.234	-0.225	-0.280
27 .769 L	0.037	0.024	0.048	-0.084	-0.110	-0.098	-0.161
28 .915 L	0.038	0.029	0.029	-0.142	-0.022	0.031	0.011
29 .960 L	0.092	0.072	0.089	-0.179	0.070	0.091	0.063

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

	RUN 29 354	RUN 29 355	RUN 29 356	RUN 29 357	RUN 29 358	RUN 29 359	RUN 29 360
	MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.40	MU 0.40
	AU -4.0	AU 0.	AU 2.0	AU 4.0	AU 6.0	AU 8.0	AU 10.0
	M 0.401	M 0.401	M 0.401	M 0.401	M 0.401	M 0.401	M 0.402
	A -4.03	A 0.	A 2.01	A 4.03	A 6.04	A 8.06	A 10.07
	QO 214.0	QO 214.0	QO 214.0	QO 214.0	QO 214.0	QO 214.0	QO 215.0
	PO 1901.3	PO 1901.3	PO 1901.3	PO 1901.3	PO 1901.3	PO 1901.3	PO 1900.2
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	0.276	1.001	0.978	0.596	-0.139	-1.057	-1.965
2 .008 U	0.947	0.328	-0.269	-1.151	-2.279	-3.610	-5.006
3 .017 U	0.741	-0.013	-0.581	-1.332	-2.266	-3.319	-4.657
4 .040 U	0.326	-0.357	-0.827	-1.363	-2.012	-2.667	-3.080
5 .065 U	0.153	-0.407	-0.756	-1.175	-1.608	-2.056	-2.436
6 .090 U	0.053	-0.449	-0.727	-1.079	-1.441	-1.783	-2.085
7 .130 U	-0.112	-0.430	-0.623	-0.917	-1.199	-1.442	-1.641
8 .168 U	-0.093	-0.422	-0.595	-0.802	-1.047	-1.248	-1.431
9 .233 U	-0.143	-0.405	-0.543	-0.731	-0.912	-1.038	-1.173
10 .335 U	-0.123	-0.315	-0.427	-0.558	-0.662	-0.763	-0.857
11 .500 U	-0.138	-0.234	-0.306	-0.396	-0.464	-0.514	-0.556
12 .625 U	-0.119	-0.161	-0.204	-0.250	-0.315	-0.331	-0.353
13 .769 U	0.000	-0.053	-0.089	-0.119	-0.144	-0.163	-0.173
14 .915 U	0.097	0.085	0.085	0.072	0.054	0.045	0.008
15 .960 U	0.234	0.201	0.200	0.163	0.116	0.101	0.055
16 .008 L	-1.614	0.031	0.541	0.841	0.953	0.976	0.916
17 .017 L	-1.783	-0.313	0.201	0.593	0.816	0.947	0.981
18 .040 L	-1.520	-0.509	-0.103	0.253	0.508	0.718	0.839
19 .065 L	-1.345	-0.613	-0.269	0.045	0.289	0.512	0.641
20 .090 L	-1.226	-0.606	-0.311	-0.049	0.174	0.387	0.525
21 .130 L	-1.076	-0.579	-0.340	-0.130	0.053	0.243	0.391
22 .168 L	-0.926	-0.548	-0.317	-0.157	0.024	0.161	0.291
23 .233 L	-0.832	-0.529	-0.359	-0.203	-0.056	0.069	0.183
24 .335 L	-0.651	-0.421	-0.286	-0.168	-0.060	0.046	0.122
25 .500 L	-0.457	-0.325	-0.228	-0.152	-0.077	0.002	0.061
26 .625 L	-0.309	-0.269	-0.207	-0.135	-0.085	-0.027	0.001
27 .769 L	-0.176	-0.131	-0.091	-0.045	-0.014	0.025	0.041
28 .915 L	0.008	0.004	0.024	0.032	0.051	0.070	0.086
29 .960 L	0.060	0.079	0.108	0.110	0.118	0.131	0.115

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

			RUN 29 361	RUN 29 362	RUN 29 363	RUN 29 364	RUN 25 304	RUN 25 305	RUN 25 306
		MU	0.40	0.40	0.40	0.40	0.50	0.50	0.50
		AU	12.0	14.0	16.0	0.	0.	-2.0	0.
		M	0.402	0.405	0.407	0.401	0.502	0.502	0.502
		A	12.07	14.06	16.04	0.	0.	-2.02	0.
		QO	215.0	217.8	219.7	214.0	315.4	315.4	315.4
		PO	1900.2	1897.1	1895.0	1901.3	1788.2	1788.2	1788.2
TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		-2.491	-1.191	-1.294	1.003	1.044	0.878	1.038
2	.008	U	-5.269	-1.386	-1.793	0.266	0.357	0.759	0.354
3	.017	U	-5.105	-1.320	-1.383	-0.042	0.004	0.460	0.011
4	.040	U	-3.690	-1.183	-1.023	-0.444	-0.372	0.048	-0.355
5	.065	U	-2.765	-1.152	-0.927	-0.421	-0.411	-0.094	-0.402
6	.090	U	-2.274	-1.125	-0.886	-0.452	-0.457	-0.180	-0.449
7	.130	U	-1.795	-1.149	-0.912	-0.548	-0.467	-0.257	-0.445
8	.168	U	-1.507	-1.079	-0.855	-0.444	-0.435	-0.243	-0.421
9	.233	U	-1.205	-0.974	-0.838	-0.429	-0.425	-0.261	-0.415
10	.335	U	-0.865	-0.894	-0.640	-0.334	-0.333	-0.218	-0.330
11	.500	U	-0.559	-0.779	-0.837	-0.296	-0.258	-0.174	-0.240
12	.625	U	-0.348	-0.681	-0.803	-0.209	-0.173	-0.136	-0.165
13	.769	U	-0.198	-0.565	-0.727	-0.092	-0.053	-0.026	-0.057
14	.915	U	-0.086	-0.415	-0.594	0.008	0.090	0.104	0.100
15	.960	U	-0.058	-0.356	-0.538	0.175	0.216	0.232	0.217
16	.008	L	0.788	0.871	0.863	0.083	0.104	-0.616	0.082
17	.017	L	0.971	0.990	0.987	-0.265	-0.279	-0.969	-0.293
18	.040	L	0.887	0.914	0.893	-0.449	-0.451	-0.986	-0.494
19	.065	L	0.703	0.743	0.726	-0.557	-0.584	-1.010	-0.597
20	.090	L	0.599	0.613	0.610	-0.557	-0.598	-0.928	-0.604
21	.130	L	0.453	0.465	0.469	-0.557	-0.586	-0.867	-0.601
22	.168	L	0.376	0.393	0.389	-0.517	-0.529	-0.759	-0.544
23	.233	L	0.239	0.270	0.261	-0.493	-0.518	-0.702	-0.539
24	.335	L	0.164	0.177	0.158	-0.401	-0.418	-0.544	-0.416
25	.500	L	0.078	0.061	0.028	-0.309	-0.305	-0.391	-0.309
26	.625	L	0.012	-0.004	-0.037	-0.228	-0.222	-0.274	-0.236
27	.769	L	0.029	-0.024	-0.085	-0.105	-0.104	-0.127	-0.118
28	.915	L	0.059	-0.068	-0.151	0.030	0.023	0.028	0.027
29	.960	L	0.097	-0.053	-0.169	0.083	0.109	0.107	0.098

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

TAP	X/C		RUN 25 307	RUN 25 308	RUN 25 309	RUN 25 310	RUN 25 311	RUN 25 312	RUN 25 313
		MU	0.50	0.50	0.50	0.50	0.50	0.50	0.50
		AU	2.0	4.0	6.0	8.0	10.0	12.0	14.0
		M	0.502	0.502	0.502	0.502	0.504	0.506	0.508
		A	2.01	4.03	6.05	8.06	10.07	12.06	14.05
		QO	315.4	315.4	315.4	315.4	317.5	319.6	321.7
		PO	1788.2	1788.2	1788.2	1788.2	1785.8	1783.4	1781.0
			CP	CP	CP	CP	CP	CP	CP
1	.000		1.001	0.654	0.072	-0.505	-0.886	-0.924	-0.814
2	.008 U		-0.250	-1.116	-2.246	-3.049	-3.447	-2.459	-1.502
3	.017 U		-0.570	-1.382	-2.448	-3.470	-3.679	-1.984	-1.367
4	.040 U		-0.854	-1.473	-2.231	-3.346	-3.432	-1.739	-1.204
5	.065 U		-0.782	-1.267	-1.769	-2.715	-2.550	-1.691	-1.186
6	.090 U		-0.773	-1.159	-1.530	-1.743	-2.237	-1.663	-1.185
7	.130 U		-0.666	-0.950	-1.247	-1.495	-1.748	-1.578	-1.190
8	.168 U		-0.637	-0.869	-1.116	-1.290	-1.525	-1.419	-1.094
9	.233 U		-0.583	-0.762	-0.948	-1.066	-1.151	-1.194	-1.020
10	.335 U		-0.443	-0.573	-0.689	-0.779	-0.819	-0.912	-0.886
11	.500 U		-0.312	-0.387	-0.458	-0.505	-0.498	-0.628	-0.725
12	.625 U		-0.213	-0.259	-0.313	-0.334	-0.326	-0.489	-0.642
13	.769 U		-0.084	-0.105	-0.135	-0.154	-0.193	-0.381	-0.550
14	.915 U		0.091	0.080	0.060	0.034	-0.078	-0.286	-0.450
15	.960 U		0.199	0.177	0.158	0.095	-0.048	-0.259	-0.394
16	.008 L		0.579	0.899	0.980	0.981	0.987	0.993	0.983
17	.017 L		0.220	0.616	0.856	0.970	0.996	0.986	0.971
18	.040 L		-0.054	0.275	0.552	0.719	0.835	0.833	0.888
19	.065 L		-0.246	0.072	0.333	0.519	0.618	0.661	0.706
20	.090 L		-0.285	-0.019	0.212	0.397	0.494	0.545	0.591
21	.130 L		-0.344	-0.102	0.097	0.256	0.360	0.396	0.450
22	.168 L		-0.307	-0.131	0.056	0.191	0.274	0.316	0.371
23	.233 L		-0.364	-0.199	-0.036	0.088	0.168	0.196	0.243
24	.335 L		-0.295	-0.177	-0.049	0.045	0.092	0.107	0.137
25	.500 L		-0.225	-0.140	-0.051	0.006	0.040	0.037	0.041
26	.625 L		-0.176	-0.121	-0.064	-0.012	0.009	-0.022	-0.032
27	.769 L		-0.087	-0.056	0.006	0.011	0.021	-0.033	-0.062
28	.915 L		0.030	0.063	0.084	0.085	0.051	-0.051	-0.094
29	.960 L		0.112	0.116	0.130	0.130	0.080	-0.021	-0.096

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

			RUN 25 314	RUN 25 315	RUN 26 316	RUN 26 317	RUN 26 318	RUN 26 319	RUN 26 320
		MU	0.50	0.50	0.60	0.60	0.60	0.60	0.60
		AU	16.0	0.	0.	-2.0	0.	2.0	4.0
		M	0.510	0.502	0.602	0.603	0.602	0.602	0.603
		A	16.04	0.	0.	-2.02	0.	2.02	4.04
		QO	323.8	315.4	421.8	422.8	421.8	421.8	422.8
		PO	1778.6	1788.2	1662.6	1661.3	1662.6	1662.6	1661.3
TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		-0.836	1.035	1.072	0.928	1.067	1.048	0.756
2	.008	U	-1.406	0.336	0.404	0.784	0.407	-0.186	-0.949
3	.017	U	-1.289	-0.010	0.041	0.489	0.042	-0.553	-1.348
4	.040	U	-0.989	-0.391	-0.374	0.045	-0.373	-0.940	-1.739
5	.065	U	-0.946	-0.423	-0.423	-0.072	-0.418	-0.867	-1.533
6	.090	U	-0.936	-0.463	-0.477	-0.167	-0.480	-0.860	-1.392
7	.130	U	-0.955	-0.643	-0.507	-0.257	-0.440	-0.733	-1.122
8	.168	U	-0.908	-0.450	-0.458	-0.250	-0.463	-0.716	-0.999
9	.233	U	-0.899	-0.416	-0.451	-0.267	-0.458	-0.640	-0.876
10	.335	U	-0.873	-0.337	-0.350	-0.231	-0.356	-0.480	-0.649
11	.500	U	-0.807	-0.274	-0.257	-0.181	-0.256	-0.333	-0.449
12	.625	U	-0.751	-0.199	-0.170	-0.134	-0.178	-0.218	-0.306
13	.769	U	-0.679	-0.060	-0.051	-0.021	-0.055	-0.080	-0.149
14	.915	U	-0.572	0.089	0.118	0.118	0.117	0.110	0.053
15	.960	U	-0.507	0.222	0.235	0.256	0.229	0.213	0.150
16	.008	L	0.984	0.118	0.161	-0.509	0.131	0.632	0.884
17	.017	L	0.978	-0.238	-0.215	-0.943	-0.275	0.275	0.593
18	.040	L	0.883	-0.444	-0.458	-1.073	-0.506	-0.038	0.260
19	.065	L	0.720	-0.572	-0.588	-1.148	-0.619	-0.202	0.073
20	.090	L	0.611	-0.566	-0.612	-1.048	-0.640	-0.274	-0.031
21	.130	L	0.451	-0.571	-0.642	-0.997	-0.662	-0.351	-0.140
22	.168	L	0.384	-0.522	-0.580	-0.848	-0.589	-0.328	-0.159
23	.233	L	0.253	-0.512	-0.562	-0.782	-0.584	-0.378	-0.244
24	.335	L	0.134	-0.410	-0.445	-0.600	-0.456	-0.309	-0.228
25	.500	L	0.032	-0.297	-0.323	-0.421	-0.326	-0.231	-0.196
26	.625	L	-0.058	-0.213	-0.226	-0.296	-0.248	-0.177	-0.171
27	.769	L	-0.096	-0.091	-0.101	-0.128	-0.117	-0.057	-0.086
28	.915	L	-0.159	0.063	0.060	0.062	0.041	0.063	0.090
29	.960	L	-0.202	0.099	0.121	0.111	0.106	0.133	0.094

S-58 AIRFOIL – TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

	RUN 26 321	RUN 26 322	RUN 26 323	RUN 26 324	RUN 26 325	RUN 26 326	RUN 26 327
MU	0.60	0.60	0.60	0.60	0.60	0.60	0.60
AU	6.0	8.0	10.0	12.0	14.0	16.0	0.
M	0.603	0.605	0.608	0.611	0.614	0.617	0.602
A	6.06	8.07	10.06	12.05	14.05	16.04	0.
QO	422.8	425.0	428.2	431.4	434.6	437.8	421.8
PO	1661.3	1658.7	1654.8	1650.8	1646.9	1642.9	1662.6
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	0.396	0.126	-0.049	-0.168	-0.274	-0.444	1.068
2 .008 U	-1.587	-1.964	-2.118	-2.005	-1.441	-1.559	0.378
3 .017 U	-1.940	-2.262	-2.348	-1.922	-1.122	-1.482	0.024
4 .040 U	-2.241	-2.530	-2.187	-1.498	-0.839	-1.205	-0.442
5 .065 U	-2.318	-2.611	-1.845	-1.314	-0.850	-1.096	-0.446
6 .090 U	-2.258	-2.522	-1.645	-1.267	-0.837	-1.083	-0.490
7 .130 U	-1.682	-2.173	-1.612	-1.234	-0.921	-0.985	-0.514
8 .168 U	-1.240	0.104	-1.331	-1.144	-0.824	-1.018	-0.487
9 .233 U	-0.870	-1.197	-1.130	-1.049	-0.797	-0.951	-0.470
10 .335 U	-0.672	-0.714	-0.896	-0.916	-0.783	-0.824	-0.369
11 .500 U	-0.456	-0.471	-0.625	-0.729	-0.760	-0.802	-0.277
12 .625 U	-0.294	-0.316	-0.478	-0.658	-0.727	-0.813	-0.206
13 .769 U	-0.112	-0.151	-0.364	-0.533	-0.673	-0.792	-0.063
14 .915 U	0.080	0.010	-0.265	-0.440	-0.560	-0.713	0.095
15 .960 U	0.157	0.080	-0.252	-0.392	-0.490	-0.655	0.224
16 .008 L	0.966	0.950	0.951	0.944	0.933	0.951	0.158
17 .017 L	0.861	0.949	0.994	0.982	0.955	0.948	-0.229
18 .040 L	0.557	0.667	0.746	0.795	0.867	0.905	-0.486
19 .065 L	0.336	0.459	0.537	0.611	0.687	0.743	-0.599
20 .090 L	0.230	0.336	0.423	0.485	0.569	0.616	-0.621
21 .130 L	0.107	0.218	0.209	0.349	0.423	0.469	-0.642
22 .168 L	0.069	0.154	0.217	0.273	0.354	0.381	-0.580
23 .233 L	-0.042	0.048	0.100	0.132	0.214	0.239	-0.571
24 .335 L	-0.063	-0.006	0.020	0.044	0.113	0.115	-0.459
25 .500 L	-0.060	-0.035	-0.035	-0.031	0.020	0.002	-0.338
26 .625 L	-0.051	-0.043	-0.070	-0.083	-0.054	-0.097	-0.239
27 .769 L	0.006	-0.002	-0.055	-0.096	-0.100	-0.152	-0.103
28 .915 L	0.093	0.079	-0.036	-0.117	-0.139	-0.226	0.042
29 .960 L	0.154	0.125	-0.016	-0.103	-0.144	-0.237	0.098

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

	RUN 27 328	RUN 27 329	RUN 27 330	RUN 27 331	RUN 27 332	RUN 27 333	RUN 27 334
	MU 0.70	MU 0.70	MU 0.70	MU 0.70	MU 0.70	MU 0.70	MU 0.70
	AU 0.	AU -2.0	AU 0.	AU 2.0	AU 4.0	AU 6.0	AU 8.0
	M 0.704	M 0.704	M 0.704	M 0.704	M 0.706	M 0.708	M 0.712
	A 0.	A -2.03	A 0.	A 2.02	A 4.05	A 6.06	A 8.06
	QO 529.3	QO 529.3	QO 529.3	QO 529.3	QO 531.4	QO 533.5	QO 537.6
	PO 1525.8	PO 1525.8	PO 1525.8	PO 1525.8	PO 1523.0	PO 1520.3	PO 1514.8
TAP X/C	CP	CP	CP	CP	CP	CP	CP
1 .000	1.114	1.019	1.116	1.092	0.946	0.762	0.616
2 .008 U	0.456	0.790	0.461	-0.045	-0.446	-0.768	-1.048
3 .017 U	0.093	0.479	0.106	-0.427	-0.837	-1.139	-1.342
4 .040 U	-0.426	0.004	-0.419	-0.997	-1.278	-1.474	-1.627
5 .065 U	-0.454	-0.086	-0.447	-1.030	-1.378	-1.610	-1.731
6 .090 U	-0.540	-0.187	-0.528	-0.975	-1.405	-1.624	-1.733
7 .130 U	-0.604	-0.368	-0.567	-0.906	-1.328	-1.649	-1.631
8 .168 U	-0.553	0.066	-0.542	-1.095	-1.480	-1.693	-1.413
9 .233 U	-0.549	-0.329	-0.541	-0.826	-1.536	-1.731	-1.167
10 .335 U	-0.413	-0.274	-0.411	-0.547	-0.814	-1.107	-1.005
11 .500 U	-0.283	-0.209	-0.279	-0.367	-0.351	-0.421	-0.742
12 .625 U	-0.189	-0.146	-0.184	-0.240	-0.250	-0.258	-0.523
13 .769 U	-0.052	-0.023	-0.047	-0.081	-0.096	-0.123	-0.325
14 .915 U	0.130	0.134	0.144	0.121	0.101	0.029	-0.182
15 .960 U	0.258	0.265	0.266	0.231	0.225	0.109	-0.148
16 .008 L	0.249	-0.243	0.242	0.631	0.906	0.987	0.954
17 .017 L	-0.152	-0.657	-0.163	0.303	0.613	0.770	0.874
18 .040 L	-0.463	-0.912	-0.470	-0.019	0.286	0.471	0.571
19 .065 L	-0.642	-1.169	-0.643	-0.211	0.091	0.258	0.374
20 .090 L	-0.709	-1.204	-0.711	-0.305	-0.020	0.139	0.257
21 .130 L	-0.800	-1.271	-0.806	-0.404	-0.135	0.007	0.114
22 .168 L	-0.695	-1.256	-0.700	-0.379	-0.157	-0.034	0.062
23 .233 L	-0.697	-1.302	-0.707	-0.439	-0.243	-0.139	-0.057
24 .335 L	-0.519	-0.550	-0.513	-0.369	-0.231	-0.169	-0.113
25 .500 L	-0.375	-0.436	-0.373	-0.268	-0.182	-0.162	-0.136
26 .625 L	-0.252	-0.300	-0.256	-0.195	-0.137	-0.135	-0.147
27 .769 L	-0.106	-0.134	-0.107	-0.076	-0.038	-0.068	-0.105
28 .915 L	0.067	0.056	0.064	0.073	0.092	0.060	-0.031
29 .960 L	0.139	0.123	0.131	0.140	0.157	0.118	0.018

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

			RUN 27 335	RUN 27 336	RUN 27 337	RUN 27 338	RUN 27 339	RUN 28 340	RUN 28 341
			MU 0.70	MU 0.70	MU 0.70	MU 0.70	MU 0.70	MU 0.80	MU 0.80
			AU 10.0	AU 12.0	AU 14.0	AU 16.0	AU 0.	AU 0.	AU -1.0
			M 0.716	M 0.721	M 0.725	M 0.729	M 0.704	M 0.811	M 0.812
			A 10.05	A 12.05	A 14.04	A 16.04	A 0.	A 0.01	A -1.00
			QO 541.6	QO 546.7	QO 550.8	QO 554.8	QO 529.3	QO 634.5	QC 635.4
			PO 1509.3	PO 1502.5	PO 1497.0	PO 1491.5	PO 1525.8	PO 1378.2	PO 1376.8
TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		0.469	0.334	0.211	0.038	1.107	1.150	1.145
2	.008	U	-1.269	-1.433	-1.534	-1.554	0.449	0.512	0.602
3	.017	U	-1.461	-1.511	-1.631	-1.709	0.080	0.170	0.263
4	.040	U	-1.631	-1.345	-1.125	-1.330	-0.471	-0.395	-0.272
5	.065	U	-1.551	-1.149	-0.835	-1.273	-0.458	-0.404	-0.302
6	.090	U	-1.454	-1.094	-0.820	-1.235	-0.545	-0.492	-0.411
7	.130	U	-1.418	-1.096	-0.883	-1.049	-0.656	-0.469	-0.582
8	.168	U	-1.181	-0.117	-0.797	-1.163	-0.562	-0.683	-0.616
9	.233	U	-1.020	-0.872	-0.796	-1.104	-0.546	-0.795	-0.687
10	.335	U	-0.886	-0.828	-0.799	-1.024	-0.421	-0.852	-0.768
11	.500	U	-0.772	-0.808	-0.809	-0.971	-0.298	-0.655	-0.613
12	.625	U	-0.690	-0.792	-0.834	-0.969	-0.204	-0.114	-0.159
13	.769	U	-0.590	-0.770	-0.849	-0.978	-0.060	-0.001	-0.053
14	.915	U	-0.477	-0.688	-0.819	-0.960	0.118	0.169	0.096
15	.960	U	-0.426	-0.633	-0.783	-0.930	0.243	0.293	0.216
16	.008	L	0.929	0.918	0.914	0.916	0.239	0.429	0.343
17	.017	L	0.952	0.994	0.968	0.935	-0.166	0.064	-0.042
18	.040	L	0.679	0.746	0.801	0.876	-0.465	-0.243	-0.329
19	.065	L	0.474	0.539	0.608	0.686	-0.644	-0.463	-0.573
20	.090	L	0.342	0.422	0.484	0.561	-0.704	-0.526	-0.619
21	.130	L	0.199	0.277	0.336	0.419	-0.801	-0.668	-0.737
22	.168	L	0.137	0.205	0.261	0.339	-0.693	-0.724	-0.776
23	.233	L	0.003	0.063	0.111	0.181	-0.701	-0.832	-0.894
24	.335	L	-0.082	-0.039	-0.006	0.054	-0.525	-0.880	-0.941
25	.500	L	-0.131	-0.113	-0.103	-0.054	-0.375	-0.970	-1.000
26	.625	L	-0.171	-0.184	-0.193	-0.169	-0.256	-0.609	-0.450
27	.769	L	-0.161	-0.211	-0.243	-0.234	-0.108	-0.247	-0.401
28	.915	L	-0.140	-0.221	-0.275	-0.278	0.059	0.066	-0.251
29	.960	L	-0.113	-0.199	-0.248	-0.241	0.132	0.133	-0.178

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° TAB DEFLECTION

			RUN 28 342	RUN 28 343	RUN 28 344	RUN 28 345	RUN 28 346	RUN 28 347	RUN 28 348
			MU 0.80	MU 0.80	MU 0.80	MU 0.80	MU 0.80	MU 0.80	MU 0.80
			AU -2.0	AU -3.0	AU -4.0	AU 0.	AU 1.0	AU 2.0	AU 3.0
			M 0.815	M 0.817	M 0.820	M 0.811	M 0.811	M 0.813	M 0.815
			A -2.00	A -3.01	A -4.01	A 0.01	A 1.01	A 2.01	A 3.02
			Q0 638.2	Q0 640.1	Q0 642.8	Q0 634.5	Q0 634.5	Q0 636.4	Q0 638.2
			P0 1372.6	P0 1369.9	P0 1365.7	P0 1378.2	P0 1378.2	P0 1375.4	P0 1372.6
TAP	X/C		CP	CP	CP	CP	CP	CP	CP
1	.000		1.141	1.121	1.099	1.151	1.154	1.143	1.136
2	.008	U	0.686	0.743	0.806	0.507	0.393	0.294	0.204
3	.017	U	0.361	0.430	0.506	0.161	0.040	-0.062	-0.146
4	.040	U	-0.125	-0.026	0.080	-0.276	-0.397	-0.494	-0.567
5	.065	U	-0.213	-0.144	-0.069	-0.411	-0.546	-0.656	-0.728
6	.090	U	-0.328	-0.264	-0.189	-0.503	-0.571	-0.690	-0.769
7	.130	U	-0.522	-0.451	-0.373	-0.649	-0.706	-0.758	-0.844
8	.168	U	-0.480	-0.424	-0.361	-0.685	-0.766	-0.832	-0.904
9	.233	U	-0.611	-0.579	-0.525	-0.798	-0.879	-0.934	-0.988
10	.335	U	-0.699	-0.654	-0.594	-0.860	-0.945	-1.002	-1.053
11	.500	U	-0.578	-0.690	-0.732	-0.894	-1.040	-0.648	-0.522
12	.625	U	-0.196	-0.250	-0.395	-0.136	-0.414	-0.445	-0.479
13	.769	U	-0.101	-0.154	-0.198	-0.001	-0.093	-0.378	-0.463
14	.915	U	0.037	-0.018	-0.062	0.164	0.161	-0.146	-0.316
15	.960	U	0.169	0.121	0.085	0.286	0.228	-0.047	-0.215
16	.008	L	0.256	0.171	0.093	0.431	0.536	0.636	0.710
17	.017	L	-0.127	-0.211	-0.303	0.055	0.176	0.279	0.378
18	.040	L	-0.401	-0.469	-0.536	-0.247	-0.133	-0.026	0.062
19	.065	L	-0.640	-0.696	-0.746	-0.472	-0.347	-0.242	-0.149
20	.090	L	-0.699	-0.766	-0.809	-0.531	-0.431	-0.341	-0.251
21	.130	L	-0.802	-0.878	-0.929	-0.674	-0.605	-0.536	-0.430
22	.168	L	-0.843	-0.902	-0.952	-0.724	-0.649	-0.475	-0.404
23	.233	L	-0.947	-1.003	-1.040	-0.841	-0.729	-0.645	-0.589
24	.335	L	-0.992	-1.044	-1.084	-0.884	-0.785	-0.708	-0.634
25	.500	L	-0.813	-0.765	-0.954	-0.934	-0.883	-0.795	-0.741
26	.625	L	-0.468	-0.523	-0.602	-0.598	-0.297	-0.227	-0.332
27	.769	L	-0.456	-0.513	-0.582	-0.293	-0.044	-0.075	-0.133
28	.915	L	-0.368	-0.462	-0.544	0.018	0.107	0.062	-0.011
29	.960	L	-0.310	-0.417	-0.508	0.095	0.173	0.111	0.028

S-58 AIRFOIL - TABULATION OF PRESSURE COEFFICIENTS 3° Tab Deflection

		RUN 28 349	RUN 28 350	RUN 28 351
		MU 0.80	MU 0.80	MU 0.80
		AU 4.0	AU 5.0	AU 0.
		M 0.817	M 0.820	M 0.811
		A 4.03	A 5.03	A 0.01
		QO 640.1	QO 642.8	QO 634.5
		PO 1369.9	PO 1365.7	PO 1378.2
TAP	X/C	CP	CP	CP
1	.000	1.115	1.089	1.148
2	.008 U	0.112	0.023	0.499
3	.017 U	-0.239	-0.319	0.151
4	.040 U	-0.685	-0.740	-0.305
5	.065 U	-0.792	-0.866	-0.419
6	.090 U	-0.832	-0.902	-0.504
7	.130 U	-0.900	-0.962	-0.732
8	.168 U	-0.961	-1.017	-0.703
9	.233 U	-1.046	-1.102	-0.807
10	.335 U	-1.084	-1.081	-0.870
11	.500 U	-0.526	-0.566	-0.894
12	.625 U	-0.517	-0.562	-0.160
13	.769 U	-0.520	-0.577	-0.003
14	.915 U	-0.406	-0.516	0.154
15	.960 U	-0.305	-0.427	0.273
16	.008 L	0.780	0.848	0.428
17	.017 L	0.458	0.544	0.066
18	.040 L	0.142	0.222	-0.228
19	.065 L	-0.072	0.005	-0.466
20	.090 L	-0.176	-0.099	-0.527
21	.130 L	-0.346	-0.263	-0.665
22	.168 L	-0.350	-0.285	-0.719
23	.233 L	-0.532	-0.471	-0.835
24	.335 L	-0.496	-0.356	-0.880
25	.500 L	-0.709	-0.689	-0.970
26	.625 L	-0.563	-0.685	-0.593
27	.769 L	-0.180	-0.409	-0.282
28	.915 L	-0.072	-0.148	0.004
29	.960 L	-0.036	-0.125	0.079